



EDGEWOOD

CHEMICAL BIOLOGICAL CENTER

U.S. ARMY SOLDIER AND BIOLOGICAL CHEMICAL COMMAND

ECBC-TR-085

**COMPUTATION OF EQUILIBRIUM PARTIAL VAPOR PRESSURES
OF AQUEOUS AMMONIA SOLUTIONS**

Paul E. Field

**VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY
Blacksburg, VA 24601-0212**

Roger J. Combs

RESEARCH AND TECHNOLOGY DIRECTORATE

June 2000

**Approved for public release;
distribution is unlimited.**



20000807 049

Aberdeen Proving Ground, MD 21010-5424

DMC QUALITY INSPECTED 4

Disclaimer

The findings in this report are not to be construed as an official Department of the Army position unless so designated by other authorizing documents.

REPORT DOCUMENTATION PAGE			Form Approved OMB No. 0704-0188	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.				
1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE June 2000		3. REPORT TYPE AND DATES COVERED Final; 99 May - 99 Oct
4. TITLE AND SUBTITLE Computation of Equilibrium Partial Vapor Pressures of Aqueous Ammonia Solutions			5. FUNDING NUMBERS C-DAAD05-99-P-1052	
6. AUTHOR(S) Field, Paul E. (VPI&SU) and Combs, Roger J. (ECBC)				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Department of Chemistry, VPI&SU, Blacksburg, VA 24601-0212 DIR, ECBC, ATTN: AMSSB-RRT-DI, APG, MD 21010-5424			8. PERFORMING ORGANIZATION REPORT NUMBER ECBC-TR-085	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)			10. SPONSORING/MONITORING AGENCY REPORT NUMBER	
11. SUPPLEMENTARY NOTES				
12a. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution is unlimited.			12b. DISTRIBUTION CODE	
13. ABSTRACT (Maximum 200 words) This report evaluates all available vapor-liquid equilibria (VLE) data from low-to-moderate pressures over the normal liquid water temperature range for the highly non-ideal aqueous ammonia solutions spanning nearly a century. The evaluation relies on all complete VLE data comprised of pressure-temperature-liquid and vapor compositions published over the last century to develop a temperature dependent model for the coefficients of the Wilson equation. The computations derived from the temperature dependent model are described by means of the program flowcharts and listings. Graphs of computed minima of the "best" Wilson coefficient pairs illustrate the statistical analysis of the experimental data. Tables of calculated deviations for three sets of Wilson coefficients corresponding to the individual and combined data sets demonstrate the utility of the model equations. Excellent agreement between the experimental and calculated liquid and vapor compositions is found for all but two data sets over the region of rapidly changing vapor composition up to 90 mole % of ammonia. This temperature dependent Wilson model offers a succinct representation of 100 years of what appear to be disparate pressure-temperature-composition VLE data.				
14. SUBJECT TERMS Vapor Liquid Equilibria Aqueous Ammonia Wilson Equation Temperature Correlation			15. NUMBER OF PAGES 235	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT UNCLASSIFIED		18. SECURITY CLASSIFICATION OF THIS PAGE UNCLASSIFIED		19. SECURITY CLASSIFICATION OF ABSTRACT UNCLASSIFIED
				20. LIMITATION OF ABSTRACT UL

Blank

PREFACE

The work described in this report was authorized under Contract No. DAAD05-99-P-1052. The work was started in May 1999 and completed in October 1999.

The use of either trade or manufacturers' names in this report does not constitute an official endorsement of any commercial products. This report may not be cited for purposes of advertisement.

This report has been approved for public release. Registered users should request additional copies from the Defense Technical Information Center; unregistered users should direct such requests to the National Technical Information Service.

Acknowledgments

The authors wish to thank Dr. Daniel G. Friend at NIST for providing us with selected VLE data from reference 18 of this report.

Blank

CONTENTS

1.	INTRODUCTION.....	7
2.	DATA.....	8
3.	PROGRAMS.....	10
4.	CONCLUSIONS	25
	REFERENCES	29
APPENDIXES		
A.	Program Listings	31
B.	Wilson Coefficient Minima.....	59
C.	Calculated Deviations for Three Sets of Wilson Coefficients.....	115

FIGURES

1.	Glossary of Flowchart Symbols	11
2.	Flowchart for Common Subroutines	12
3.	Flowchart for Coarse Grid Search	16
4.	Flowchart for Fine Grid Search	18
5.	Flowchart for Locating Best W_{ij} Pairs	19
6.	Flowchart for Graphing Vapor and Liquid Mole Fractions	21
7.	Flowchart for Tabulating Calculated Deviations	23
8.	Flowchart for Graphical Comparison of W_{ij} Results	24

TABLES

1.	Distribution of Data	9
2.	File Number, Name, and Category	13
3.	Wilson Coefficient Goodness of Fit	26

COMPUTATION OF EQUILIBRIUM PARTIAL VAPOR PRESSURES OF AQUEOUS AMMONIA SOLUTIONS

1. INTRODUCTION

This report evaluates all the known vapor pressure studies of aqueous ammonia at low to moderate (10 atm) pressures over the liquid water temperature range (0 - 100° C). The data used in this study has been garnered from all sources that could be found in the literature and represents nearly a century of reported work. This study is essentially a continuation of the study reported in our report of June 1996: "Computation of Partial Vapor Pressures of Aqueous Volatile Organic Compound Solutions," ERDEC-TR-342.¹ However, there are some significant differences besides the systems studied. In the Conclusions of that report, we stated that the series of computer programs developed would "provide the means to obtain a consistent set of partial vapor pressures for any volatile compound at any specified temperature in the liquid range and any composition within the single phase region of a solution." Perhaps implicit in that statement was "volatile organic compound (VOC)" which was the stated thrust of the study. In evaluating the Wilson activity coefficient model (as previously) using the pressure-temperature-liquid and vapor compositions (PTXY) of aqueous ammonia solutions, it became apparent that the least squares analysis used with the VOCs was not possible.²

The Wilson coefficient first introduced by Wilson³ was recast by Orye and Prausnitz⁴ as

$$W_{ij} = (v_j^L/v_i^L) \exp - [(\lambda_{ij} - \lambda_{ii}) / RT] \quad (1)$$

where v_i^L are the pure liquid molar volumes and the λ_{ij} are proportional to the intermolecular interaction energies. The excess Gibbs free energy for an N component system is obtained in terms only of pairwise coefficients as

$$\Delta G^{xs}/RT = -\sum_i^N X_i \ln [\sum_j^N X_j W_{ij}] = \sum_i^N X_i \ln \gamma_i \quad (2)$$

with the activity coefficient for a two component system in terms of the Wilson coefficients given by

$$\ln \gamma_i = -\ln [X_i + W_{ij} X_j] + X_j [W_{ij}/(X_i + W_{ij} X_j) - W_{ji}/(X_j + W_{ji} X_i)]. \quad (3)$$

We have previously shown for several binary aqueous volatile organic compound (VOC) systems of simple alcohols or ketones that better agreement as measured by the average deviation of the vapor mole fractions are obtained by searches over PTXY data using the residual sum of the squares for the excess free energy ($SQ = \sum r_i^2$) as the objective function. Here,

$$r_i = \sum X_i \ln \gamma_i (\text{obs}) - \sum X_i \ln \gamma_i (\text{calc}) \quad (4)$$

with
$$\gamma_i (\text{obs}) = (Y_i / X_i)(P / P_i^o) \quad (5)$$

where P_i^o is the vapor pressure of the pure component at the observed temperature and is calculated using an empirical equation, and $\ln \gamma_i (\text{calc})$ is obtained from eqn. (3).

2. DATA

Our object is to determine the pair of Wilson's coefficients, W_{12} and W_{21} , for a given set of experimental data. Throughout, we shall assign NH_3 as component 1 and H_2O as component 2 in our calculations. Examination of the equations given above make it readily apparent that each "point" requires knowledge of the concentration of the liquid solution, X , and the vapor, Y , in equilibrium with the liquid as well as the temperature, T , and total vapor pressure, P , of the equilibrium. There have been many studies which do not provide all the information required, generally omitting the vapor composition. Analysis of these studies will be presented at the end of this report. Composition is usually reported in mol fraction, $X_1 = n_1^L / (n_1^L + n_2^L)$ with $X_2 = 1 - X_1$ for the liquid, similarly for the vapor with n_i^V 's: $Y_1 + Y_2 = 1$. Compositions reported in molality, m (mols solute/unit mass solvent) are easily converted to mol fraction, however when concentrations are given in molarity, M (mols solute/unit volume solution), additional information in the form of temperature dependence of solution densities is required.

There are 69 sets from 18 references ranging up to 34 points per set with most lying between 5 and 15 points per set. All but two of the data sets are isothermal, i.e. all the points in the set are for the same value of T . The other two are isobaric but of sufficiently small composition range that their points span less than a 10 degree temperature range, both having a total vapor pressure of 760 torr (1 atm). We have divided these data sets into four categories: (1) Primary Data: the unsmoothed PTXY sets used to evaluate the temperature dependence of the Wilson coefficients; (2) Secondary Data: PTXY data of sets having three or fewer isothermal points or whose mole fractions had to be calculated from concentration units that require solution density assumptions; (3) Refined Data: PTXY sets reported from smoothed experimental data; and (4) Partial Data: under-determined results which reported only the Partial (*N.B.* not Total) vapor

pressure of ammonia and the liquid state concentration. The distribution of sets by category is presented in Table 1.

TABLE 1. Distribution of Data

Category	# Ref.	# Sets	# Points	# Iso-T/Ps.	T(°C)Range
1. Primary ⁵⁻¹²	8	27	285	13	0 - 100
2. Secondary ^{9,13-16}	5	12	83	8/2	0 - 100
3. Refined ^{6,17-19}	4	20	171	17	0 - 98
4. Partial ²⁰⁻²²	3	10	76	8	0 - 35

Except for the ten sets in the Partial category, the data sets are stored in all the programs as the identical set of DATA statements with most occupying only one program line number. These 59 sets occupy lines numbered between 10 and 82. These lines plus the data statements holding the coefficients of the pure component vapor pressure equations^{23,24}, a routine to read them into the program (lines 92-99) and another routine to define the background and foreground screen colors (lines 1 to 9 and 85 to 91) actually form a program file NH3DATA.DAT that was merged with six computation programs. The Partial Data sets were only incorporated in the one program, NH3FIGS.BAS, that summarizes correlations between calculated and measured values. They are stored as Data Statements with line numbers above 800.

The NH3DATA.DAT program file is the first of the Program Listings in Appendix A. Line 10 of the file listing summarizes the format of all the Data Statements. Following the line number and the DATA tag, the data set name (referred to as a filename and composed of a three character abbreviation of the reference author(s) catenated to a number corresponding to the iso-temperature or pressure) is followed by an Iso-P/T code (Isobar=1, Isotherm=2), next the value of the Isobar(torr)/Isotherm(°C), then the number of points, N, in the set. After these four entries, each point has three values of Y(NH3), X(NH3), and T(°C) or P(torr). After these N triplets, the pair of Wilson coefficients, (W₁₂, W₂₁) found to give the "best" fit have been appended as they were computed.

In addition to the PTXY data and the previously mentioned coefficients for the empirical vapor pressure equations for the pure components, the programs also require values of the pure molar volumes (reciprocal densities) as a function of temperature^{25,26} as evident in equation(1). These empirical equations are embedded in the programs where required, in particular in the Partial Pressure subroutine to be discussed presently. The

remaining empirical equation required in the computations is the temperature dependence of the solution density of aqueous ammonia²⁷ which is also incorporated directly in the last program, NH3FIGS.BAS, where required (subroutine at line 750).

3. PROGRAMS

The programming language used is GWBASIC, the version developed by Microsoft for IBM's introduction of the original PCs in 1983. It is an interpreted language (contrasted to a compiled one) and was supported through Version 3.23 in 1988 before being superceded by Quickbasic, QBASIC and finally Visual BASIC with growing sophistication in "point and click" (mouse) operations and Windows orientation. The fundamental (basic) computational steps incorporated in these listings would remain the same in all versions, only the input/output format would differ significantly. The biggest loss subsequent to (MS-)DOS for these programs was the loss of the printer activating Print Screen key without invoking the Windows clipboard. In their present form these programs allow printing of graphs and tables during execution by invoking the Print Screen key during programmed pauses deactivated by pressing any (other) key. The Appendices to this report were generated in that manner. Speed and ease of writing, testing and running remain a hallmark of GW(Gone with the Windows)BASIC. Language source and program can be packaged in 100 Kilobytes (Kb). The six programs use between 18 and 24 Kb of which the DATA statements use 14 Kb. The EXE file occupies 81 Kb.

The six programs are given in Appendix A: Program Listings, following the NH3DATA.DAT listing. They are presented in the same order as their order of application. Perhaps more illuminating than the listings themselves, flowcharts of the programs summarizing the significant operations of each program will be discussed. A glossary of chart symbols is shown in Figure 1. Common to all of the six programs are three routines which are illustrated in Figure 2. In most instances, each program must be run separately once for each data set. Since the data sets are listed serially a routine to read up to the DATA statement(s) containing the desired set is necessary. It is called FILEREAD in the flowcharts. Its flowchart is shown in middle portion of Figure 2. In some of the later programs the line numbers have been changed from the 400's to the 700's. The first column of this flowchart reads through all the data sets to establish a maximum size required for dimensioning (allocating data memory storage) the variables. The second column shows the sequence to read through all data sets up to but not

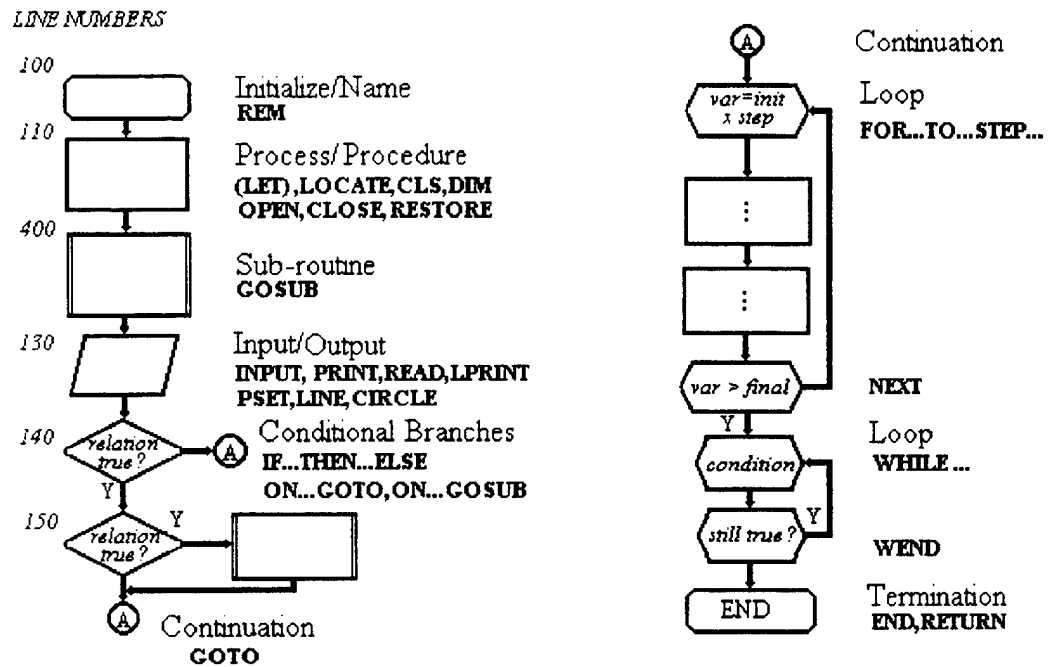


Figure 1. Glossary of Flowchart Symbols

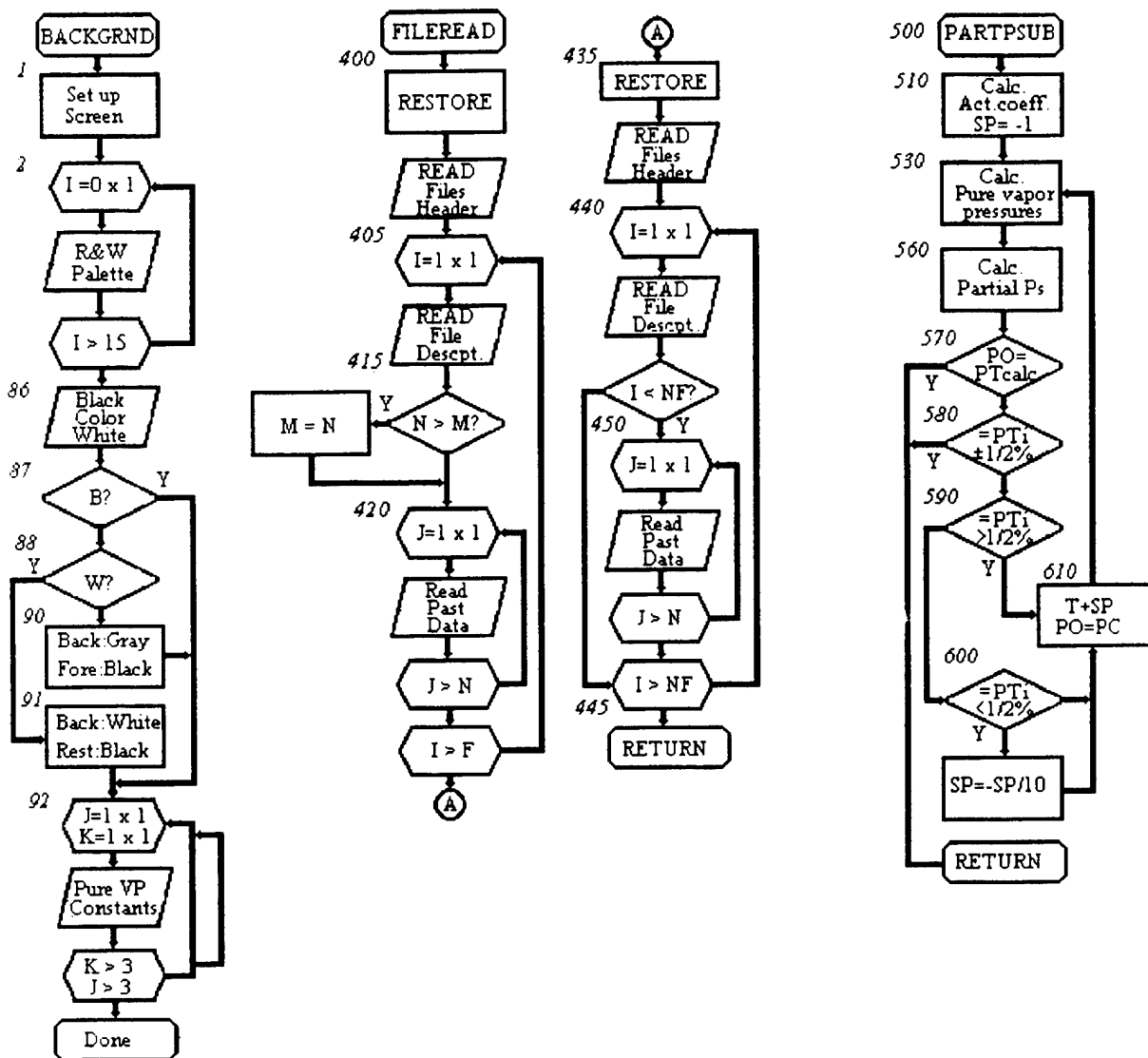


Figure 2. Flowchart for Common Subroutines

including the one to be used identified by the variable NF. This variable is listed in Table 2 as the Number of File for each of the data sets.

TABLE 2. File Number, Name, and Category

1. PRIMARY						
1. PER0	2. PER10	3. PER20	4. PER30	5. PER40	6. PER50	7. PER70
8. WIL0A	9. WIL2A	10. WIL4A	11. WIL6A	12. WIL8A	13. WIL9A	
14. C&H60	15. C&H80	16. C&H90	17. C&H100			
18. KUR41	19. KUR61	20. KUR81	21. KUR100			
22. HAR100						
23. MUL100						
24. RIZ32	25. RIZ69	26. RIZ86A				
27. INO60						
2. SECONDARY						
28. HAR35	29. HAR40	30. HAR50	31. HAR75			
32. GIL41	33. GIL61	34. GIL81				
35. NEU0	36. NEU20	37. NEU40				
38. P&L760						
39. SAK760						
3. REFINED						
40. RWU05	41. RWU10	42. RWU20	43. RWU30	44. RWU40	45. RWU50	46. RWU60
47. CWU28	48. CWU52	49. CWU63	50. CWU78	51. CWU98		
52. WILS0	53. WILS10	54. WILS21	55. WILS32	56. WILS43	57. WILS54	58. WILS60
59. MAC60						
4. PARTIALS						
60. M&M25	61. M&M18	62. M&M10	63. M&M0			
64. S&D25						
65. HOU35	66. HOU27	67. HOU25	68. HOU23	69. HOU15		

The routine listed on the left column of Figure 2, labeled BACKGRND, is incorporated around the data set between lines 1 and 99. It allows selection of display mode for plotting and printing graphs and tables. A color palette of 16 colors is indexed from 0 to 15 in the order: black (background), brown, red, red-orange, orange, yellow-orange, yellow, yellow-green, green, blue-green, blue, blue-violet, violet, red-violet, gray, white (foreground). Selection of the background provides three alternative displays. Black mode may be used for printing with the Print Screen key. The black background and white foreground are automatically inverted to print black ink on white paper. Colors used in the foreground are printed as varying shades of gray on a B/W printer. Color mode employs a gray background and black foreground. This mode is particularly useful for screen display and Windows clipboard saves. The screen image can be imported into paint programs for enhancement and printing: especially useful for generating overhead transparencies. The white mode deletes all color in the palette and substitutes black for all foreground values. It is most useful for importing via Windows clipboard for B/W printing. Following the display mode selection, the variables for the two sets of three

coefficients for the empirical pure vapor pressure equations for water and ammonia are initialized. This routine then commences into the program's main body. All programs but one operate in GWBASIC's highest resolution graphics display mode (640W by 350H) with the 16 color palette. This mode (Screen 9) however has low resolution character printing. This routine is invalidated when the usual non-graphics mode is selected. This mode (Screen 1) prints at the standard 80 characters wide by 6 lines/inch and is the desired mode for listing. The Print Screen key is still active in the mode for normal resolution printing.

The third subroutine, PARTPSUB, presented in Figure 2 is the most crucial routine in evaluating the statistical fit of the experimental data. Values of W_{12} and W_{21} have been set before calling the subroutine and the observed values of X_1 , P and T read for the point to be evaluated. X_2 is computed as $1-X_1$. This provides all the information required to compute the activity coefficients of both components via equation (3). The pure vapor pressures, P_i^o , are computed for the value of T and combined with the activity coefficients, γ_i , to compute the total pressure from the partial pressures from the relations:

$$(i) P_1 = \gamma_1 P_1^o X_1 ; \quad \text{and } (ii) P_{\text{calc}} = P_1 + P_2 .$$

The routine now uses a damped oscillation algorithm to adjust the T in order to obtain agreement between the observed total vapor pressure and the calculated value to within a bound of $\pm 0.5\%$. This assumes that the experimental errors are associated with both the temperature and pressure measurements without involving variation in the liquid composition. On return from the subroutine, the main program will compute the calculated vapor fractions as $Y_{i(\text{calc})} = P_i/P_{\text{calc}}$ to compute the deviation from the experimental Y_i and tally the statistics, particularly SQ , for the selected parameters.

Unlike the aqueous VOC systems cited above, minimization of SQ by the usual least squares method of solving the two partial derivative equations: $(\delta SQ / \delta W_{ij}) = 0$ was not possible. As had been noted for one set earlier by Hirata,²⁸ we found that iterative solutions of these (non-linear) equations do not converge for any of the aqueous ammonia data sets. As an alternative means of solution, two computerized grid searches were carried out. A preliminary coarse search over the practical range of $0.1 \leq W_{ij} \leq 12.0$ was performed and 120 point data files of the value of W_{21} having the smallest SQ found for each value of W_{12} stepped by increments of 0.1 in each coefficient were obtained for each

experimental data set. In all cases a minimum curve for $SQ(W_{21})$ vs. W_{12} and monotonic dependence of W_{21} on W_{12} was found. The second fine search generated a 200 point data file over a range of two units of W_{12} about the coarse minimum using a commensurate range of W_{21} at increments of 0.01 in each coefficient. More sophisticated search algorithms, such as simplex, were not used because the discreteness of a data set does not guarantee the non-existence of false minima.

The flowchart of the first program, NH3GRID1.BAS, is illustrated in Figure 3. The program generates a 120 x 4 entry sequential file over a wide range (i.e. coarse grid) in W_{ij} . Each of the 120 sets of four values corresponds to a value of W_{12} ranging from 0.1 to 12.0 in increments of 0.1. The four entries consist of two pairs of values. The first value of each pair is W_{21} having the minimum mean residual over the range from 0.1 to 12.0 by 0.1. The second value of each pair is the associated minimum mean residual for the two objective functions. For each objective function, the program calculates and saves the minimum found for the sum of deviations between the computed and experimental data. The first objective function, denoted R2, is the excess free energy yielding a mean residual (sum of squares) calculated by equation (4) as SQ/N . The second mean minimum is the average deviation (absolute residual) between the calculated and experimental values of the ammonia vapor mole fraction, denoted Y1. In the left column of the flowchart, the option is made for examining an old file or creating a new one. The name for the sequential file is formed as UN*filename*.WRY where "*filename*" is the name stored as the first entry in the DATA statement for the particular data set. If the file is old the program branches to the fourth column of the chart and reads the file from disk. If it is new, the data set is selected and read and the search is commenced as shown in the second and third columns and described above. The file is written to disk and then proceeds to the graphing routine starting at line 790. Had this been an old file it would have been read from disk at line 750 and then gone into the graphing routine. The noteworthy part of this routine involves the graph scaling factor, variable SC. By cycling from line 900 through 915 and back to 790, the user can adjust the magnification of the plot until he presses ENTER at line 900 without entering a new value (then SC will equal zero). At this point, small circles are plotted at the minima in R2 and Y1 and the screen may be printed. On pressing any (other) key, the file is listed in six lists of 20 lines (a screenful with pause) for examination. Although not shown in the flowchart, at the end of the program a line is printed to the screen in the form of a data statement which when a line number is inserted and ENTER is pressed after the insertion

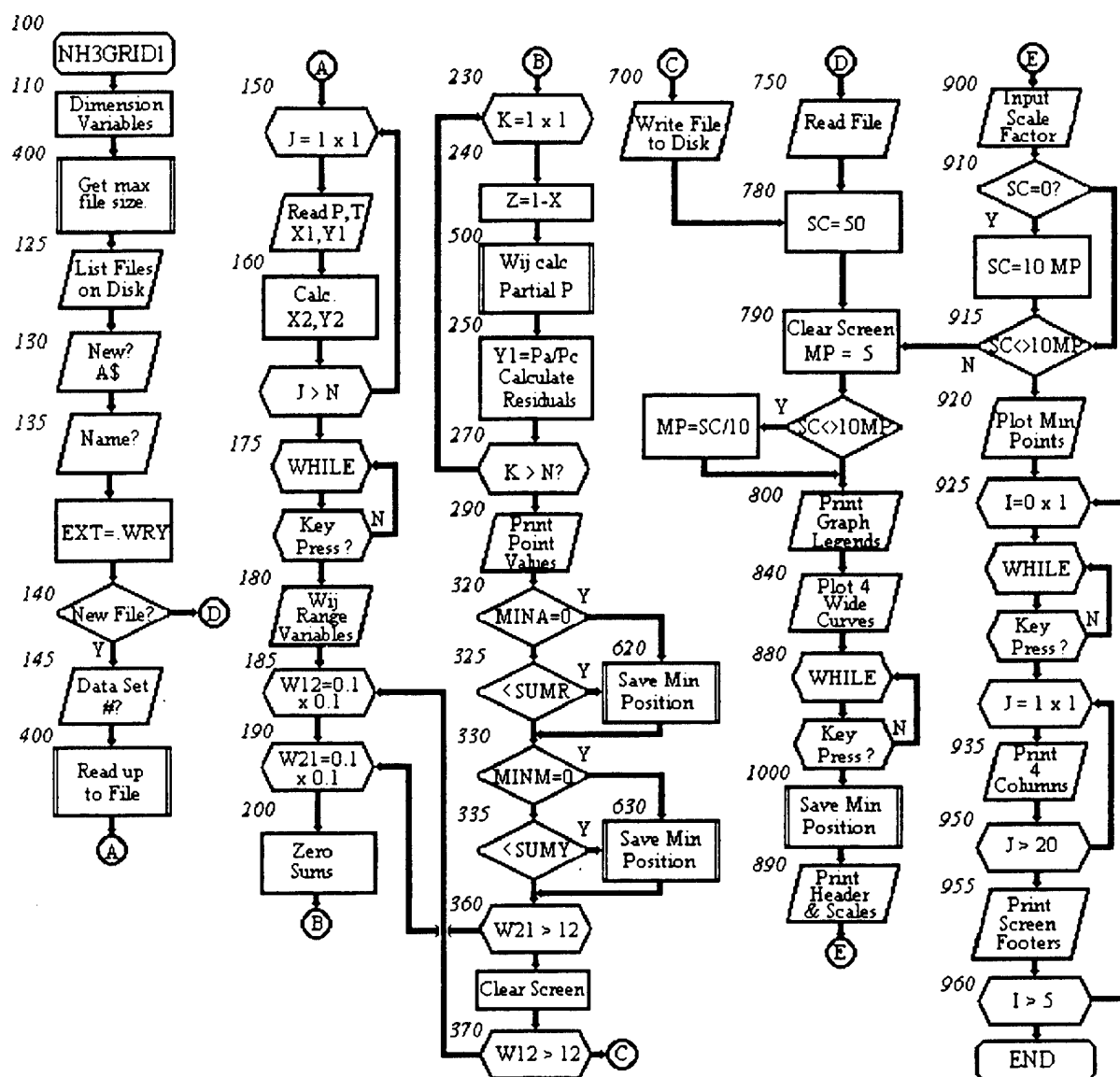


Figure 3. Flowchart for Coarse Grid Search

the data statement is incorporated into the program which can then be saved to disk. These data statements are listed in lines 1300 to 1350 and give the minima values for both objective functions.

Figure 4 shows the flowchart for NH3GRID2.BAS. It generates a narrow (fine grid search) 200 x 4 entry sequential file over a range of 2 in W_{12} at increments of 0.01. Data is stored for each entry exactly like the previous program. The range of W_{12} is fixed by the initial value selected. The range of W_{21} is unlimited but the increment is also fixed at 0.01. Selection is made based on the results of the NH3GRID1.BAS program. This program generates either of two data files depending on which of the objective functions is chosen for the search since the minimum for one objective function may not fall within the range of W_{12} for the other. The data filenames are the same as previously but the extension to the file names are either .WR2 or .WY2. All other procedures in the program are similar to those in the previous discussion. The graphs display both files such that the narrow file overlays the minima of the wide curves. In many cases, the sawtooth curves of the wide search are clearly shown to be an artifact of the step size as they are smoothed by the narrow grid search curve. The captured data statements printed when the program ends have been saved between lines numbers 1100 - 1234. In instances where the minimum for the Y1 objective function does not lie within ten points of the range of the R2 objective function then separate data statements are saved with amended file names to indicate which is the true minimum, clearly in some instances the values for the other function are not significant.

NH3GRIDS.BAS is presented in Figure 5. It does not contain the grid search portion of the previous programs. Like NH3GRID2.BAS, it opens both the wide and narrow files of the selected data set and, as indicated at the lower part of the left column of the flowchart, ascertains whether a second narrow file is required because the minima do not overlap as described in the previous paragraph. The graph replots all values with selected magnification as four curves having a common abscissa (W_{12}) and left and right sided ordinates of the average deviations (a.d.) and W_{21} respectively for both the R2 and the Y1 residuals. These graphs may be screen printed and have been compiled in the Appendix C. After the graph is displayed, any pressed key clears the screen and lists the values of W_{12} and W_{21} and the (percent) average deviation for ten points on either side of the true minima for both objective functions both to the screen and to the (line) printer. This is in lieu of screen printing the list because of the poorer character resolution in

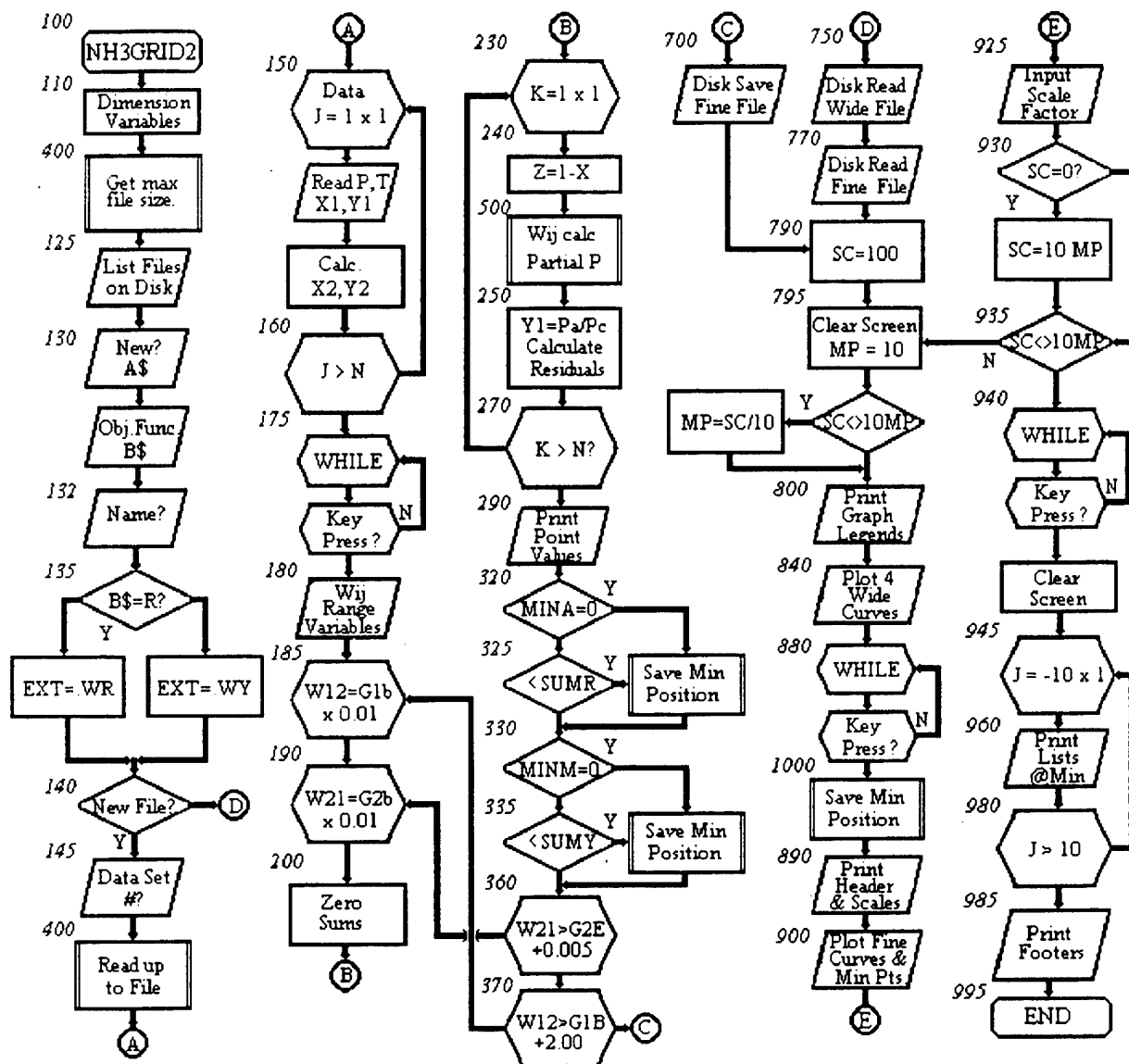


Figure 4. Flowchart for Fine Grid Search

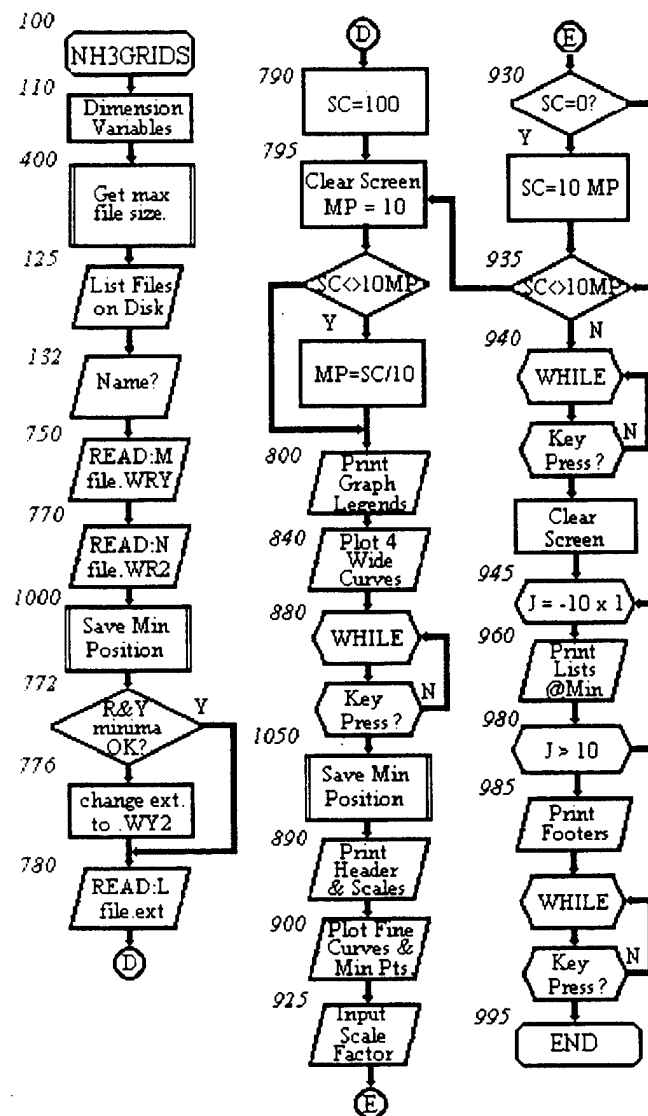


Figure 5. Flowchart for Locating Best W_{ij} Pairs

graphics mode. These lists have also been included in Appendix C. Their value is in verifying that the minimum is at the point reported even though there is some oscillation of the values of the average deviations. In most cases, of course, the minimum can be verified visually outside the 21 point range from the graph.

Average deviations notwithstanding, the agreement between the individual data and their calculated values, i.e. the individual deviations of the data set, provide an important visual means of assessing goodness of fit. The program flowcharted in Figure 6, NH3PLOTS.BAS, generates diagrams of liquid mole fraction versus vapor mole fraction for the separate data sets. Ideal solution (Raoult's law) behavior is represented by a straight line of unit slope, i.e. from (0,0) to (1,1). Highly non-ideal aqueous ammonia typically shows 90 mol % vapor at 30 mol % liquid. Anticipating the desirability of gauging the fit of other pairs of Wilson coefficients besides the grid search "best" pair, the program provides for user input of the W_{ij} pair. The experimental points are differentiated from the calculated ones by plotting the former as filled circles and the latter as open circles. This prevents the calculated points from obliterating the experimental ones. A calculated (continuous) curve is plotted further showing the fit. One note concerning the Partial Pressure subroutine in this program is that the damped oscillation algorithm is excluded because, at concentrations above the highest experimental point, without an experimental value for comparison the curve progressively diverges. A summary of the statistics of the fit are computed and printed below the ideal slope. The graphs of the data sets for the grid search values of the Wilson coefficients are given in Appendix C.

Twenty-seven data sets comprising 285 points over thirteen isotherms of Primary PTXY data have yielded twenty-five pairs of Wilson coefficients capable of being correlated to their temperatures with only two pairs excluded as out-liers. This correlation and its interpretation have been discussed by the authors.²⁹ The correlation is found to depend on an hyperbolic relation between the W_{ij} pairs and is based on equation (1) in the form: $W_{ij} = (v_j^L/v_i^L) \exp - [(\lambda_{ij} - \lambda_{ii}) / RT] = (v_j^L/v_i^L) \exp - [f(T)]$ such that: $W_{12} W_{21} = \exp - [\Sigma(T)]$ and $W_{12}/W_{21} = (v_2^L/v_1^L)^2 \exp - [\Delta(T)]$. The functions $\Delta(T)$ and $\Sigma(T)$ were found to be nearly linear ($a + bT$) but with sufficient curvature that alternate parabolic functions ($a' + b'T + c'T^2$) could be fitted within the overall precision of the data. This gives rise to two additional assignments of the W_{ij} pairs for each data set, referred to as the Linear $f(S)$ and Curved $f(S)$ Wilson coefficient pairs.

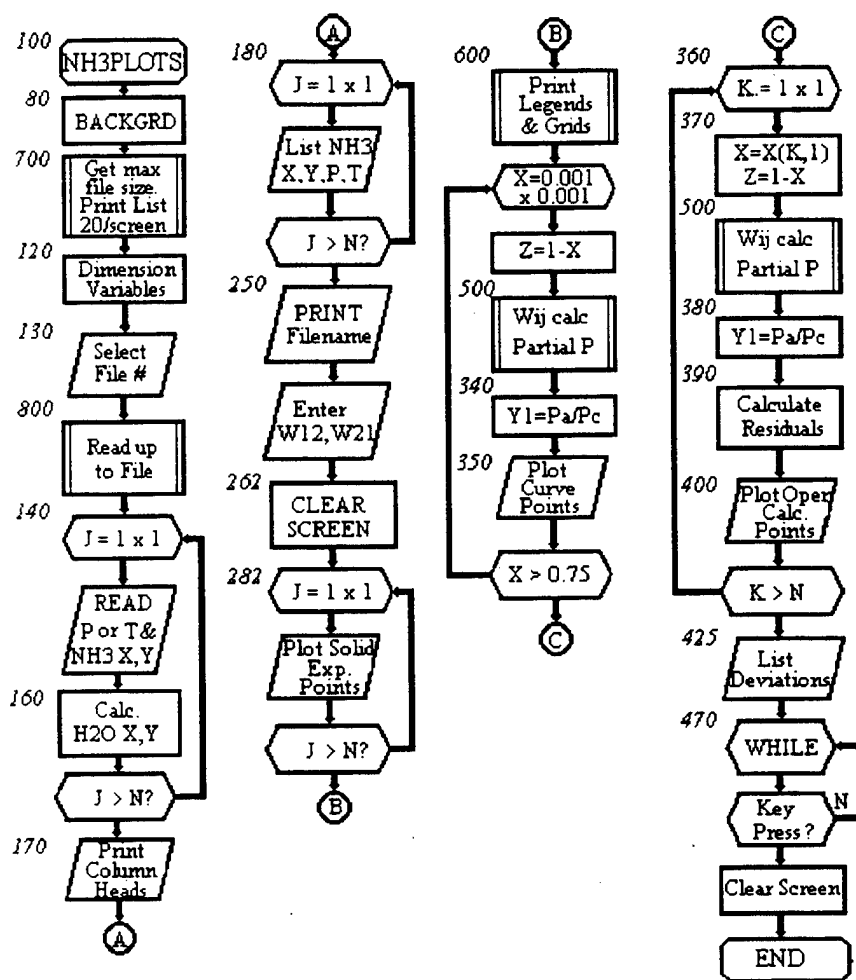


Figure 6. Flowchart for Graphing Vapor and Liquid Mole Fractions

NH3LISTS.BAS is a program to provide all experimental and computational results for each of the 59 data sets of categories 1 - 3 for any pair of Wilson coefficients. The flowchart shown in Figure 7 is straight forward. The "best" grid search pair of Wilson coefficients are read from the DATA statements and stored as variables G1 and G2. W_{12} , W_{21} for the Curved $f(S)$ and Linear $f(S)$ functions are calculated from temperature dependent equations included in line numbers 210 - 240 and stored as the variables G3, G4 and G5, G6 respectively. The output is a screen list with a row for each point in the data set having nine columns of the following quantities for that point:

- (1) $X_1(i)$ - experimental liquid mol fraction of NH_3 ,
- (2) $P_t(i)$ - experimental (total) vapor pressure,
- (3) $P_t(c)$ - calculated (total) vapor pressure,
- (4) %dPt - relative error in $P_t(c)$,
- (5) $Y_1(i)$ - experimental vapor mol fraction of NH_3 ,
- (6) $Y_1(c)$ - calculated vapor mol fraction of NH_3 ,
- (7) $T(i)$ - experimental equilibrium temperature,
- (8) $T(c)$ - computed equilibrium temperature,
- (9) $P_1(c)$ - calculated partial vapor pressure of NH_3 .

The listed is followed by the values of the Wilson coefficients used in the computation and a summary of the statistics for the data set including the standard error (63% confidence level) and average deviation (50% confidence level) of the ammonia vapor fraction Y_1 ; the average deviation of both the absolute (in mm Hg) and relative (total) vapor pressure; the value for the mean sum of squares of the excess free energy residuals (SQ/N) described in the Introduction; and, finally, the average deviation of the computed temperatures of the individual data ($^{\circ}\text{C}$). The graphics display mode is aborted for text mode thus allowing high resolution character screen printing. The program pauses for each screenful to allow screen printing and as necessary form feeding shown at the end of the third and in the fourth column in the flowchart. The tables generated for the three sets of Wilson coefficients are included along with the plots in Appendix C.

The final program, NH3FIGS.BAS, is a rather elaborate set of graphing routines used to generate several of the figures used to display the individual data points of the various categories as isotherms either as log P-X: pressure (total or partial); or Y-X: vapor composition versus liquid composition. The flowchart is shown in Figure 8. In

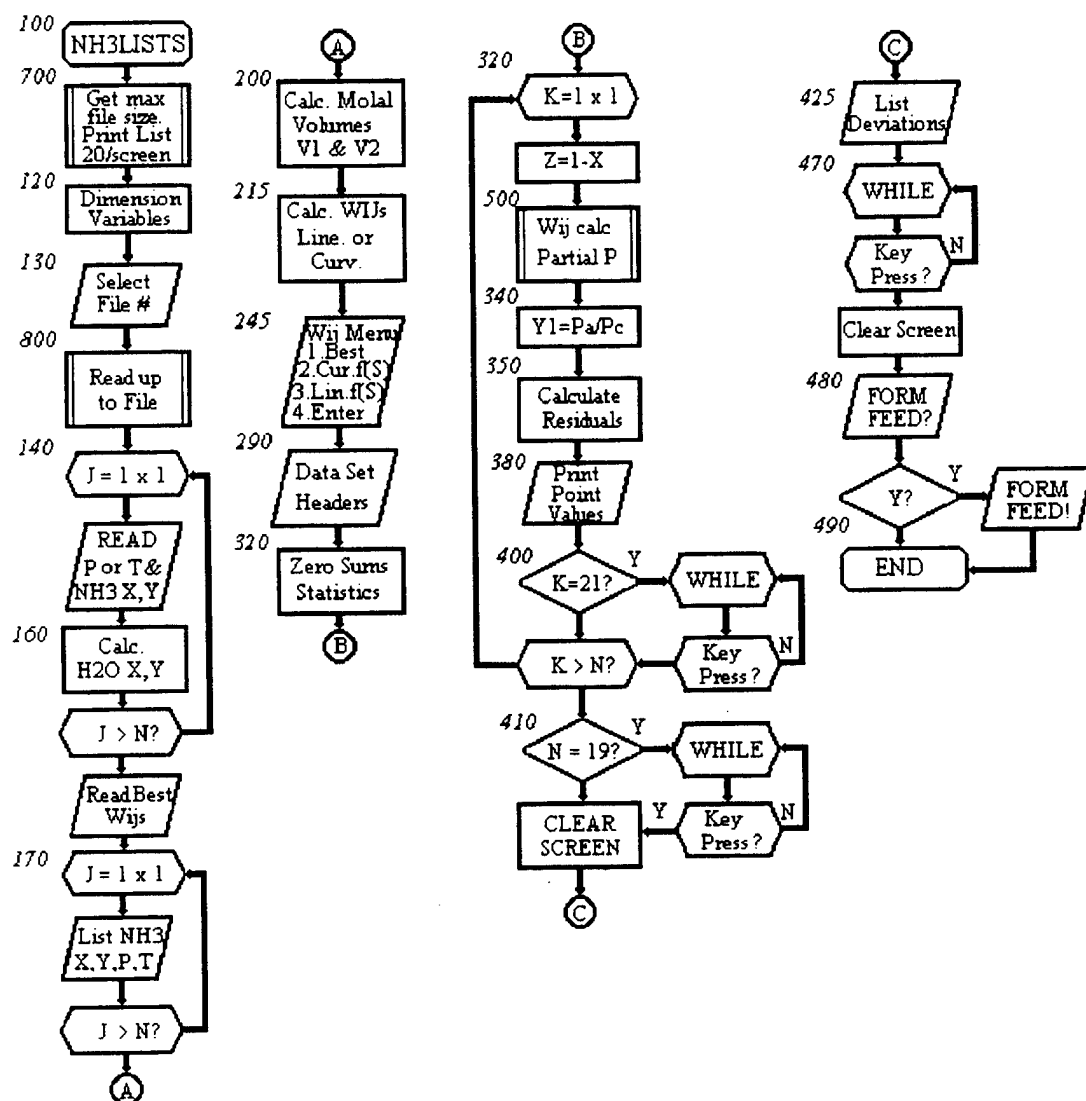


Figure 7. Flowchart for Tabulating Calculated Deviations

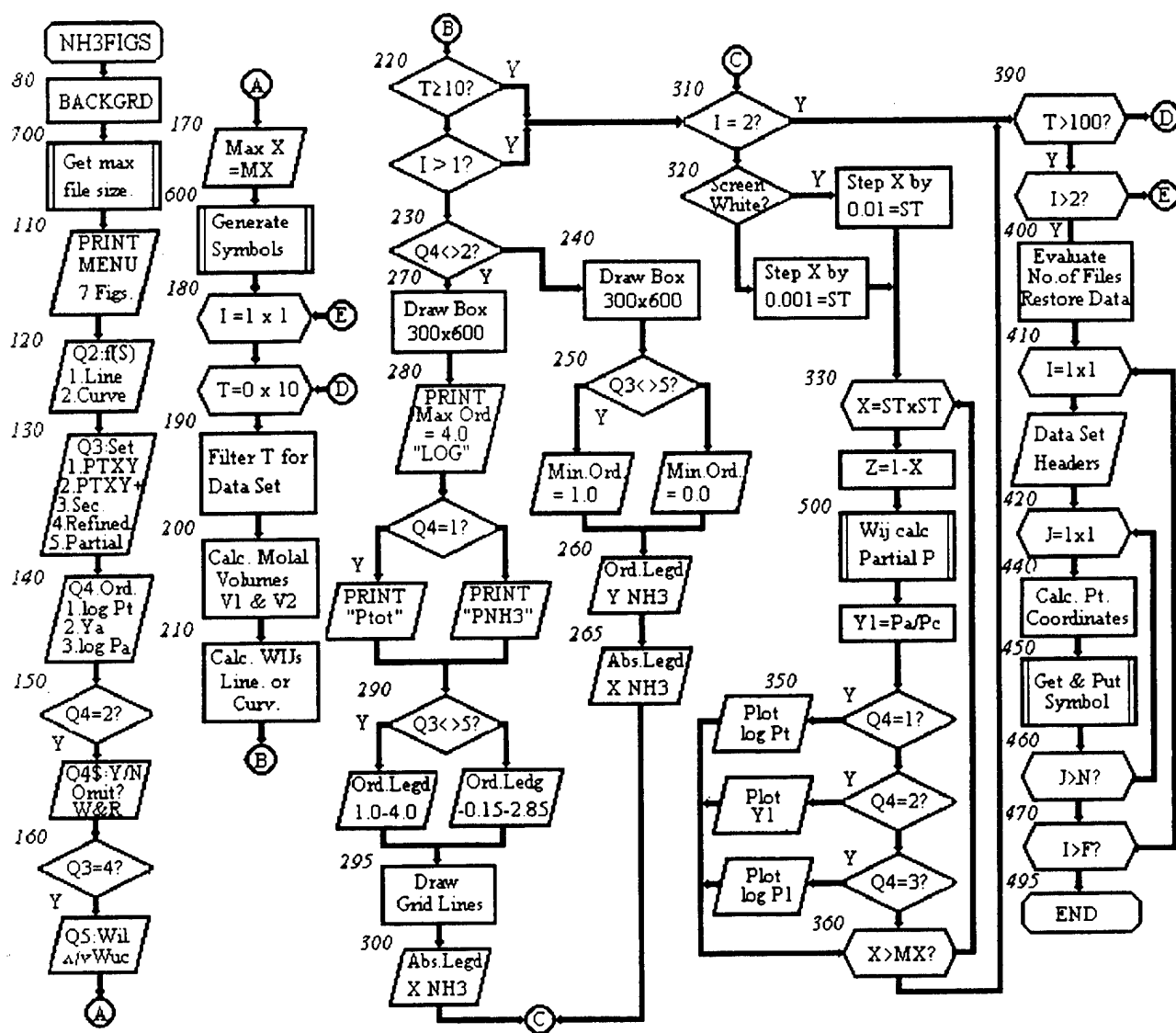


Figure 8. Flowchart for Graphical Comparison of W_{ij} Results

color mode, each temperature curve and the data points (circles) are plotted in different colors (red to blue with increasing T). In order to assist in distinguishing the various data sets, the data circles are small graphic generated capital letters which are printed in the plotted data point circle and correspond (generally) to the reference author's initial. There are three major options and two minor ones encoded as initial Q variable names. The major options are (1) selection between Linear or Curved $f(S)$; (2) one of five data categories including the Primary set with or without the two outlying data sets, and (3) one of three choices of dependent variable as Y_1 , log Pt, or log P_1 . A menu is provided for selecting the Q variables to reproduce the figures intended. Other selections are possible, some of which would no doubt generate meaningless graphs. Nothing is gained by preventing these but more convoluted programming which only complicates the program flow.

4. CONCLUSIONS

The best means of summarizing the results of this report is to provide a complete tabulation of the results in terms of the goodness of fit of the three sets of Wilson coefficients for the 27 sets of data used to establish the correlation. Table 3 lists the significant details which can be distilled from the graphs and tables of both Appendix B and C. They are presented in terms of both the vapor mole fraction and the total equilibrium vapor pressure, i.e. the two significant experimentally dependent quantities when solutions are prepared with given liquid mole fraction and temperature as the experimental independent variables. It should be noted that the mean residual sum of squares (SQ/N) is always least for the grid search coefficients as it ought to be. The other noteworthy quantity is the contrast between the absolute and relative pressure deviations.

We believe this report is the most comprehensive survey of the low-to-moderate pressure equilibria analysis of a system of fundamental chemical interest as well as one of industrial and ecological importance. We also believe that it provides the best correlation of the diverse sources of experimental data. The extreme difficulty of obtaining good data in even the simplest system is made abundantly evident by examining the variations observed in the data gleaned from the literature: all from sources of reputable and competent researchers. It is an exercise in hubris to suppose that a new single study could resolve the question addressed and answered in this report.

Table 3. Wilson Coefficient Goodness of Fit

NOTES:

^aFor each isotherm. First entry: based on minimized residual sum of squares (SQ) of excess free energy of individual isotherm; Second entry: group (25 isotherms) fitted Dif S and Sum S functions to parabolic temperature dependence ($a+bT+cT^2$); Third entry: group fitted Dif S and Sum S functions to linear temperature dependence ($a + bT$).

^bMean value of the calculated residual excess free energy.

^cAverage Deviation of Ammonia Vapor Mole Fraction: $\Sigma[Y_{\text{obs}} - Y_{\text{calc}}]/N$.

^dAverage Deviation of Total Vapor Pressure, torr: $\Sigma[P_{\text{obs}} - P_{\text{calc}}]/N$.

^eAverage Deviation of relative Total Vapor Pressure, %: $\Sigma\{[P_{\text{obs}} - P_{\text{calc}}]/P_{\text{obs}}\}/N$.

Ref.	T, °C ^a	W ₁₂	W ₂₁	SQ/N ^b	BESE(Y _A)	ad(Y _A) ^c	ad(P _T), torr ^d	%ad(P _T) ^e
Perman	0.0	4.81	2.78	5.730e-3	0.0187	0.0129	3.2	10.06
		5.40	2.57	6.548e-3	0.0151	0.0114	4.1	10.30
		5.49	2.26	1.672e-2	0.0219	0.0153	2.8	5.20
	10.0	4.93	2.26	3.325e-3	0.0097	0.0067	2.6	3.52
		5.31	2.21	4.493e-3	0.0115	0.0081	2.7	3.94
		5.36	2.08	4.628e-3	0.0084	0.0057	2.2	2.63
	19.9	4.63	2.02	1.579e-4	0.0038	0.0023	3.6	2.52
		5.22	1.92	2.795e-3	0.0086	0.0073	2.5	1.86
		5.23	1.91	2.407e-3	0.0072	0.0060	2.0	1.41
	30.1	4.56	1.86	2.496e-4	0.0033	0.0026	2.9	1.40
		5.12	1.69	5.627e-4	0.0023	0.0016	4.4	1.52
		5.10	1.75	1.155e-3	0.0056	0.0047	8.1	3.02
	40.0	3.87	1.87	4.196e-4	0.0050	0.0041	6.6	1.93
		5.01	1.52	1.700e-3	0.0046	0.0039	8.2	1.66
		4.97	1.61	3.475e-3	0.0094	0.0086	19.7	4.96
	50.0	4.56	1.49	2.887e-5	0.0017	0.0012	1.3	0.38
		4.88	1.39	1.082e-4	0.0034	0.0029	2.8	0.88
		4.83	1.48	9.805e-4	0.0098	0.0091	14.3	3.62
	60.0	6.90	0.88	2.970e-4	0.0056	0.0038	4.4	0.96
		4.73	1.28	1.503e-3	0.0101	0.0080	3.5	0.78
		4.69	1.37	8.829e-4	0.0106	0.0101	12.3	2.88
Wilson	0.0	7.00	2.35	4.404e-2	0.0137	0.0056	407	34.8
		5.40	2.57	5.203e-2	0.0189	0.0074	325	27.7
		5.49	2.26	5.903e-2	0.0250	0.0098	324	30.1
	20.0	5.49	1.70	1.567e-2	0.0054	0.0029	848	32.1
		5.22	1.92	1.621e-2	0.0040	0.0023	834	31.0
		5.23	1.91	1.614e-2	0.0041	0.0023	833	31.0
	40.0	4.13	1.72	1.449e-2	0.0118	0.0051	981	23.0
		5.01	1.52	1.714e-2	0.0101	0.0057	1173	28.1
		4.97	1.61	1.830e-2	0.0080	0.0053	1187	28.7
	60.0	3.23	1.88	7.868e-4	0.0026	0.0016	608	13.7
		4.74	1.28	7.813e-3	0.0073	0.0063	855	20.2
		4.69	1.37	9.005e-3	0.0067	0.0060	889	21.1
	80.0	2.68	1.92	1.117e-5	0.0005	0.0004	371	7.26
		4.39	1.15	6.412e-3	0.0089	0.0082	603	12.4
		4.38	1.18	6.573e-3	0.0081	0.0071	611	12.2
	90.0	2.77	1.82	2.910e-4	0.0025	0.0024	446	6.96
		4.18	1.13	5.190e-3	0.0151	0.0123	674	12.8
		4.20	1.10	5.402e-3	0.0171	0.0137	664	13.1

Ref.	T, °C ^a	W ₁₂	W ₂₁	SQ/N ^b	BESE(Y _A)	ad(Y _A) ^c	ad(P _T), torr ^d	%ad(P _T) ^e
Clifford	60.0	3.51	1.65	1.497e-3	0.0185	0.0148	10.0	2.24
		4.74	1.28	2.031e-3	0.0211	0.0154	5.5	9.93
		4.69	1.37	3.071e-3	0.0210	0.0178	18.2	3.80
	80.0	6.47	0.76	2.720e-4	0.0099	0.0073	29.7	2.74
		4.39	1.15	8.228e-4	0.0130	0.0102	10.0	0.95
		4.38	1.18	5.731e-4	0.0120	0.0095	17.3	1.75
	90.0	7.64	0.49	1.439e-4	0.0095	0.0068	6.0	0.75
		4.18	1.13	1.584e-4	0.0097	0.0062	5.7	0.72
		4.20	1.10	1.698e-4	0.0100	0.0083	2.7	0.39
	100.0	2.37	1.64	1.968e-5	0.0034	0.0030	5.6	0.60
		3.95	1.13	2.505e-5	0.0051	0.0051	3.9	0.43
		3.99	1.04	1.590e-4	0.0102	0.0097	11.1	1.22
	40.0	4.91	1.59	3.689e-3	0.0185	0.0110	6.6	2.53
		5.01	1.52	4.076e-3	0.0214	0.0138	2.6	0.86
		4.97	1.61	3.956e-3	0.0179	0.0120	11.0	4.38
Kurtz	60.0	5.12	1.20	8.420e-4	0.0080	0.0058	29.8	3.20
		4.73	1.28	9.969e-4	0.0084	0.0059	20.9	2.24
		4.69	1.37	1.353e-3	0.0102	0.0080	48.3	5.90
	79.9	6.94	0.61	7.167e-4	0.0153	0.0122	60.5	4.17
		4.39	1.15	1.129e-3	0.0127	0.0110	28.9	1.99
		4.38	1.18	1.319e-3	0.0149	0.0123	39.6	3.00
	100.5	4.33	0.97	7.424e-5	0.0036	0.0027	42.6	2.15
		3.93	1.13	4.123e-4	0.0087	0.0078	86.3	4.36
		3.98	1.04	2.295e-4	0.0073	0.0063	8.4	0.42
	100.0	4.71	1.17	4.450e-2	0.0332	0.0184	2917	19.2
		3.95	1.13	4.995e-2	0.0545	0.0288	1835	11.2
		3.99	1.04	5.194e-2	0.0604	0.0315	1746	10.3
	100.0	3.49	1.29	1.285e-4	0.0041	0.0029	204	4.70
		3.95	1.13	2.686e-4	0.0047	0.0043	231	5.09
		3.99	1.04	1.091e-3	0.0137	0.0113	180	4.46
Rizvi	32.4	7.86	1.09	6.073e-2	0.0204	0.0124	1281	43.5
		5.09	1.65	6.820e-2	0.0216	0.0121	977	35.9
		5.07	1.72	6.787e-2	0.0198	0.0115	983	36.7
	68.6	5.99	1.38	2.246e-2	0.0315	0.0192	1775	37.5
		4.60	1.21	5.004e-2	0.0688	0.0420	1132	21.5
		4.56	1.28	4.515e-2	0.0642	0.0394	1167	23.0
	86.5*	14.84	0.10	3.757e-2	0.0570	0.0320	4572	38.5
		4.26	1.13	8.398e-2	0.0893	0.0549	1632	15.3
		4.26	1.13	8.433e-2	0.0900	0.0552	1627	15.1
	59.7*	1.13	3.05	2.017e-3	0.0007	0.0006	581	15.4
		4.74	1.28	8.035e-2	0.0169	0.0112	1554	21.5
		4.70	1.37	8.422e-2	0.0183	0.0119	1585	22.7

*Outliers: not used in Dif S or Sum S fitting.

Blank

REFERENCES

- [1] P. E. Field, R. J. Combs, R. B. Knapp, Computation of Partial Vapor Pressure of Aqueous Volatile Organic Compound Solutions, ERDEC-TR-342, Aberdeen Proving Ground, MD, June 1996.
- [2] P. E. Field, R. J. Combs, R. B. Knapp, *Appl. Spectrosc.*, **50** (1996) 1307-1313.
- [3] G. M. Wilson, *J. Am. Chem. Soc.*, **86** (1964) 127-130.
- [4] R. V. Orye, J. M. Prausnitz, *Ind. Eng. Chem.*, **57** (1965) 18-26.
- [5] E. P. Perman; *J. Chem. Soc. (London)*, **79** (1901) 718-725; **83** (1903) 1168-1184.
- [6] T. A. Wilson, The Total and Partial Vapor Pressures of Aqueous Ammonia; Bulletin 146; Engineering Experiment Station, University of Illinois, Urbana, 1925, 47 pp.
- [7] I. L. Clifford, E. Hunter, *J. Phys. Chem.*, **37** (1933) 101-118.
- [8] F. Kurz, Dissertation, Universitat Kaiserslautern, 1994.
- [9] F. Harms-Watzenberg, Messung und Korrelation der thermodynamischen Eigenschaften von Wasser-Ammoniak-Gemischen, Fortschr.-Ber. VDI 3, No. 380, VDI, Dusseldorf, 1995.
- [10] G. Muller, E. Bender, G. Maurer, *Ber. Bunsen-Ges. Phys. Chem.*, **92** (1988) 148-160.
- [11] S. S. H. Rizvi, R. A. Heidemann, *J. Chem. Eng. Data*, **32** (1987) 183-191.
- [12] H. Inomata, N. Ikawa, K. Arai, S. Saito, *J. Chem. Eng. Data*, **33** (1988) 26-29.
- [13] P. C. Gillespie, W. V. Wilding, G. M. Wilson, *AIChE Symp. Ser.*, **83** (1987) 97-124.
- [14] B. S. Neuhausen, W. A. Patrick, *J. Phys. Chim.*, **25** (1921) 693-720.
- [15] J. Polak, B. C. Y. Lu, *J. Chem. Eng. Data*, **20** (1975) 182-183.
- [16] T. Sako, T. Hakuta, H. Yoshitome, *J. Chem. Eng. Japan*, **18** (1985) 420-426.
- [17] J. Wucherer, *Z. Ges. Kalteind.*, **39** (1932) 97-104 and 136-140.
- [18] R. Tillner-Roth, D. G. Friend, *J. Phys. Chem. Ref. Data*, **27** (1998) 45-61, 63-96.
- [19] R. A. Macriss, B. E. Eakin, R. T. Ellington, J. Huebler, Physical and Thermodynamic Properties of Ammonia-Water Mixtures, Res. Bull. 34, Inst. of Gas Technology, Chicago, 1964, pp. 35-37.
- [20] O. M. Morgan, O. Maass, *Can. J. Res.*, **5** (1931) 162-199.
- [21] F. E. C. Scheffer, H. J. De Wijs, *Rec. Trav. Chim.*, **44** (1925) 655-662.
- [22] O. A. Hougen, *Chem. Met. Eng.*, **32** (1925) 704-705.
- [23] S. Ohe, Computer Aided Data Book of Vapor Pressure, Data Book Publishing Co., Tokyo, 1976, p. 1941.
- [24] L. Haar, J. S. Gallagher, G. S. Kell, NBS/NRC Steam Tables, Hemisphere Publishing
- [25] National Research Council, E. W. Washburn, Ed., International Critical Tables, McGraw-Hill Book Co.; New York; Vol. III, 1st Ed., 1928, p.234
- [26] G. S. Kell, *J. Chem. Eng. Data*, **20** (1975) 97-105.
- [27] O. Sohnel, P. Novotny, Densities of Aqueous Solutions of Inorganic Substances, Physical Sciences Data 22, Elsevier, New York, 1985, p. 31.
- [28] M. Hirata, S. Ohe, K. Nagahama, Computer Aided Data Book of Vapor-Liquid Equilibria; Kodansha Limited, Elsevier Scientific Publishing Company; Tokyo, 1975, p.760
- [29] P. E. Field and R. J. Combs, Fluid Phase Equilibria, submitted for publication (2000).

Blank

**APPENDIX A
PROGRAM LISTINGS**

```

1 SCREEN 9: KEY OFF: CLS
2 FOR I=0 TO 15: READ K: PALETTE I,K: NEXT I
3 PRINT TAB(30);"SCREEN MENU"
4 PRINT TAB(10);"BLACK - use for DOS PRINT SCREEN (Printed in Reverse)"
5 PRINT TAB(10);"WHITE - use for WIN PRINT SCREEN (Saved to CLIPBOARD)"
6 PRINT TAB(10);"COLOR - use for viewing and/or printing (gray on B/W)"
9 DATA 0,20,4,52,38,54,62,22,2,3,57,9,13,5,7,63
10 DATA "NH3","H2O",59: 'File,Iso-code,P/T,N,...,YNH3,XNH3,Teq/Ptot,...,W12,W21
11 DATA PER0,2,0,0,5, .0498,.6909,16.5, .0963,.8239,31.1, .1545,.9260,55.4, .2052,.9650,85.8,
.2391,.9765,119.4, 4.81,2.78
12 DATA PER10,2,10,0,6, .0439,.6445,25.6, .0870,.80087,46.0, .1294,.8942,71.8, .1665,.9314,102.1,
.2147,.9540,156.4, .2280,.9686,175.3, 4.93,2.26
13 DATA PER20,2,19,9,9, .0441,.6256,43.8, .0685,.7399,61.9, .0690,.7419,62.0, .0813,.7827,71.8,
.1067,.8422,95.7, .1130,.8545,101.0, .1743,.9279,179.0, .2029,.9460,227.9, .2439,.9671,312.7, 4.63,2.02
14 DATA PER30,2,30,0,9,7, .0415,.5698,72.3, .0783,.7472,115.5, .1026,.8081,148.5, .1341,.8681,201.6,
.1860,.9213,315.0, .1868,.9230,315.4, .2243,.9482,426.7, 4.56,1.86
15 DATA PER40,2,40,0,6, .0400,.5332,114.6, .0775,.7240,183.7, .1163,.8165,267.6, .1630,.8891,397.7,
.1815,.9092,470.4, .2179,.9384,613.9, 3.87,1.87
16 DATA PER50,2,50,0,6, .0347,.4689,168.7, .0622,.6346,238.4, .0938,.7482,329.6, .1216,.8091,422.3,
.1485,.8543,528.4, .1567,.8663,562.3, 4.56,1.49
17 DATA PER60,2,60,0,5, .0407,.4872,281.0, .0608,.6036,357.7, .0819,.6844,438.9, .0986,.7439,511.2,
.1241,.7849,606.2, 6.90,0.88
18 DATA WIL0A,2,0,8, .108,.816,20.75, .254,.9742,128.3, .305,.9858,219.8, .321,.98832,257.3,
.533,.997999,1203.3, .65,.999119,1818, .702,.999413,2114, .85,.999751,2764, 7.00,2.35
19 DATA WIL2A,2,20,11, .168,.9065,151, .213,.9447,240.6, .294,.9773999,522.1, .314,.9811799,632.6,
.345,.9865,832.4, .416,.993,1431.1, .565,.99774,2980, .583,.9977,3128, .634,.99834,3665,
.683,.998737,4140, .7280001,.999127,5365, 5.49,1.70
20 DATA WIL4A,2,40,10, .1127,.785,224.3, .231,.9415999,708.4, .285,.9658999,1116, .308,.9716,1337,
.3105,.9729,1353, .364,.9839999,2000, .552,.99553,5191, .62,.99697,6474, .6640001,.99762,7293,
.737,.9984159,8593, 4.13,1.72
21 DATA WIL6A,2,60,10, .1139,.762,549, .136,.814,681.6, .192,.892,1092, .238,.9284,1551,
.286,.9533,2201, .299,.9571,2406, .34,.9694,3113, .374,.9765,3815.3, .444,.9858,5572, .54,.99242,8553,
3.23,1.88
22 DATA WIL8A,2,80,4, .115,.724,1122, .149,.799,1484, .265,.9261,3401, .368,.9664,6454, 2.68,1.92
23 DATA WIL9A,2,90,4, .0900,.616,1234, .162,.796,2091, .308,.935,5404, .343,.9534,7180, 2.77,1.82
24 DATA C&H60,2,60,0,15, .0101,.1802,182.40, .0208,.2997,217.36, .0359,.4216,269.80,
.0359,.4045,269.80, .0386,.4448,278.16, .0495,.5659,316.16, .0495,.5669,316.16, .0521,.5698,326.80,
.0637,.6154,370.12
25 DATA .0832,.7078,443.84, .0912,.7341,478.80, .1260,.8021,639.92, .1260,.8011,639.92,
.1613,.8493,839.04, .1979,.9049,1102.76, 3.51,1.65
26 DATA C&H80,2,80,0,8, .0101,.1500,414.96, .0208,.2935,481.84, .0359,.3943,578.36,
.0386,.4247,597.36, .0637,.5450,782.80, .0832,.6440,930.24, .1250,.7468,1295.80, .1250,.7448,1295.80,
6.47,0.76
27 DATA C&H90,2,90,0,7, .0053,.0727,563.92, .0101,.1377,605.72, .0155,.2009,649.80,
.0208,.2442,696.16, .0239,.3058,727.32, .0391,.4004,854.24, .0584,.5121,1036.64, 7.64,0.49
28 DATA C&H100,2,100,0,3, .0053,.0647,808.64, .0155,.1884,915.80, .0315,.3283,1089.08, 2.37,1.64
29 DATA KUR41,2,39,99,34, .0386,.44,112.5, .0386,.4901,113.3, .0386,.4868,114.0, .0386,.5395,114.0,
.0386,.4967,113.3, .0386,.5099,113.3, .0386,.5166,113.3, .0386,.5099,113.3, .0719,.6996,174.8,
.07190,.6940,174.0, .0719,.6957,172.5, .0719,.6943,171.8
30 DATA .0719,.6842,171.0, .0719,.6943,171.8, .0719,.7018,171.0, .1158,.8431,267.8,
.1159,.8291,267.8, .1159,.8319,267.8, .1159,.8319,267.8, .1159,.8319,267.8, .1022,.7898,235.5,
.1022,.7898,235.5, .1022,.7873,236.3, .1022,.8,236.3

```

31 DATA .1022,.7873,236.3, .1022,.7873,236.3, .1022,.7873,236.3, .1022,.7905,236.3,
.1756,.8653,445.5, .1756,.8891,446.3, .1756,.8958,446.3, .1756,.8975,446.3, .1756,.9008,446.3,
.1756,.9007,445.5, 4.91,1.59: '3 lines: 40C - 34 unavgd. points

32 DATA KUR61,2,60.0,14, .0979,.7162,510.0, .0980,.7302,511.5, .0979,.7354,513.0,
.0979,.7362,514.5, .0979,.7485,513.0, .0979,.7442,513.0, .0979,.7485,513.0

33 DATA .1767,.8618,971.3, .1767,.8673,972.1, .1767,.8704,972.1, .1767,.8711,972.1,
.1767,.8726,971.3, .1767,.8726,971.3, .1767,.8717,970.6, 5.12,1.20: '60C:14 unaveraged points

34 DATA KUR81,2,79.9,34, .0359,4,577.5, .0359,4,154,576.0, .0359,4,141,576.0, .0359,4,185,575.3,
.0359,4,263,575.3, .0359,4,250,575.3, .0689,.5883,810.8, .0689,.5874,810.8, .0689,.5902,810.8,
.0689,.5883,810.8, .0689,.5939,810.8: '80C: 1 of 3

35 DATA .0689,.5920,810.8, .0688,.6004,810.8, .0688,.6022,810.8, .0688,.6050,810.8,
.0688,.6142,810.8, .0688,.6078,810.8, .0688,.6087,810.8, .0688,.6161,810.8, .0688,.6087,810.8,
.0949,.6729,1043.3, .0949,.6705,1042.6, .0949,.6739,1041.8: '80C: 2 of 3

36 DATA .0949,.6724,1041.8, .1096,.7284,1162.6, .1096,.7379,1161.8, .1096,.7427,1160.3,
.1096,.7395,1160.3, .1775,.8261,1893.2, .1775,.8316,1893.2, .1775,.8349,1893.9, .1775,.8368,1893.9,
.1775,.8352,1893.9, .1775,.8376,1893.9, 6.94,0.61: '80C: 34 unavgd.

37 DATA KUR100,2,100.5,5, .0948,.6406,1978.7, .0948,.6338,1978.7, .0948,.6403,1978.7,
.0948,.6452,1978.7, .0948,.6391,1978.7, 4.33,0.97: '5 unavgd. points

38 DATA HAR100,2,100.5, .09866,.52396,1972.8, .39938,.94698,10775, .49002,.97618,15905,
.70813,.9906,28180, .89339,.99309,39775, 4.71,1.17

39 DATA MUL100,2,100.9, .0647,.515,1433, .0658,.519,1508, .0917,.617,1868, .1033,.667,1928,
.1166,.690,2220, .1475,.756,2813, .1850,.820,3450, .2479,.884,5040, .3181,.930,7388, 3.49,1.29

40 DATA RIZ32,2,32.4,13, .1122,.7660,270.0, .1157,.8039,285.0, .1263,.8632,495.0, .1883,.8862,390.0,
.2648,.9633,1320.1, .3740,.9832,1792.6

41 DATA .4017,.9891,2482.7, .5046,.9935,3900.3, .5645,.9930,3802.8, .6051,.9953,4252.8,
.6710,.9960,5437.9, .7670,.9976,7065.6, .9085,.9989,9240.8, 7.86,1.09

42 DATA RIZ69,2,68.6,22, .0621,.3825,667.6, .0985,.6254,990.1, .1029,.6336,1020.1,
.1030,.6184,885.1, .1143,.6597,975.1, .1491,.7371,1155.1, .1497,.7357,1267.6, .1688,.8633,1515.1,
.2214,.8930,2002.7, .2416,.8691,2047.7, .3102,.9235,3037.7

43 DATA .3322,.9550,4005.3, .3603,.9542,4207.8, .3900,.9744,5392.9, .4188,.9693,5415.4,
.4702,.9778,6750.6, .5160,.9879,8565.7, .5815,.9895,10770.9, .5909,.9906,11003.4,
.6369,.9937,13118.6, .7414,.9960,16313.8, .9560,.9970,21631.8, 5.99,1.38

44 DATA RIZ86A,2,86.5,19, .0368,.2025,870.1, .0428,.2352,907.6, .0777,.4114,1147.6,
.1064,.5534,1440.1, .1399,.6826,1897.7, .2054,.8150,2895.2, .2837,.8948,4672.9, .2935,.9053,4830.4,
.3261,.9154,5753.0, .4173,.9517,8918.2, .4724,.9635,11325.9

45 DATA .4805,.9655,11370.9, .5442,.9750,14378.7, .6162,.9831,18114.0, .7257,.9890,23199.4,
.7337,.9898,23604.4, .7997,.9918,26424.7, .8934,.9957,30467.5, .9711,.9980,33932.8, 14.84,0.10

46 DATA INO60,2,59.7,6, .197,.928,1200, .318,.975,2550, .440,.991,4875, .554,.996,7951,
.683,.998,11626, .832,.999,15526, 1.13,3.05

47 DATA HAR35,2,35.2, .70882,.98984,6343.1, .8761,.99404,8942.6, 0,0

48 DATA HAR40,2,40.1, .36039,.98978,2021.0, 0,0

49 DATA HAR50,2,50.3, .37236,.98440,2809.1, .70795,.99656,9539.6, .90507,.99811,13392.5, 0,0

50 DATA HAR75,2,75.2, .69637,.99571,17180, .89575,.99777,24104, 0,0

51 DATA GIL41,2,40.9, .0102,.21535,69.8, .0483,.59186,129.5, .1028,.79071,237.8, .1985,.92017,542.8,
.2930,.9667,1153.6, .5118,.9945,4085.6, .6892,.99823,7446.6, .7350,.99863,8273.2,
.7900,.99898,9203.3, 4.63,1.53: ',.8850,.99943,10545.9

52 DATA GIL61,2,60.6, .0101,.1807,177.6, .0475,.53746,304.1, .1022,.75273,537.7,
.1994,.90055,1178.9, .2945,.95509,2290.7, .5110,.99044,7188.6, 3.77,1.53: ',.6965,.99647,12826,
.7638,.99741,14169, .8033,.99785,15309, .9063,.99884,17844

53 DATA GIL81,2,80.5, .0098,.14827,413.6, .0485,.49192,670.7, .1011,.70706,1107.4,
.2006,.87541,2329.0, .3089,.94448,4318.1, 3.40,1.43: ',.5107,.98359,11633, .7141,.99329,20634,
.7436,.99400,21564, .7674,.99453,22239, .8131,.99544,24204, .8246,.99566,24407

54 DATA NEU0,2,0,0,8, .51676,.9986,916.3, .52382,.9987,945.2, .54735,.9991,1141.0,
.61206,.99945,1409.8, .62765,.9995,1499.7, .65076,.9996,1684.6, .65711,.9997,1732.5,
.66621,.9998,1865.5, 4.56,3.45

55 DATA NEU20,2,20,11, .34886,.9873,737.4, .36508,.9885,807.3, .42077,.9925,1148.6,
.42392,.9927,1173.6, .43086,.9932,1234.4

56 DATA .43731,.9936,1289.3, .48175,.9958,1684.1, .49941,.9967,1944.3, .53940,.9981,2660.1,
.55970,.9986,3080.5, .56923,.9987,3281.2, 10.04,2.33

57 DATA NEU40,2,40,12, .25011,.9537,788.5, .25366,.9533,810.2, .30690,.9725,1166.1,
.32686,.9784,1364.5, .33134,.9794,1405.0, .36326,.9814,1820.9

58 DATA .39026,.9907,2200.5, .41133,.9923,2479.0, .42925,.9935,2850.4, .44624,.9945,3244.0,
.44557,.9944,3232.0, .46335,.9952,3657.6, 11.50,3.10

59 DATA P&L760,1,760,12, .0247,.2925,90.73, .0206,.2506,92.0, .01527,.1967,93.9,
.01267,.1656,94.84, .00703,.096,96.90, .0067,.0872,97.51

60 DATA .0051,.0685,98.08, .00389,.0547,98.08, .00326,.0436,98.8, .00292,.0395,98.9460,
.0015,.0205,99.46, .00103,.0135,99.65, 0.93,2.82

61 DATA SAK760,1,760,12, 8.66e-6,1.02e-4,100, 2.92e-5,3.48e-4,100, 5.92e-5,7.20e-4,99.9, 1.20e-4,1.67e-3,100.0, 1.86e-4,2.50e-3,99.7, 1.98e-4,2.68e-3,99.7, 5.29e-4,7.18e-3,99.8, 7.47e-4,1.06e-2,99.7,
8.46e-4,1.17e-2,99.7, 1.23e-3,1.63e-2,99.5

62 DATA 1.64e-3,2.18e-2,99.3, 1.98e-3,2.76e-2,99.2, 4.26,1.86

63 DATA RWU05,2,5,6, .2329,.9687,152, .2792,.9801,228, .3181,.9886,304, .3507,.9943,380,
.3913,.9972,532, .4418,.9991,760, 2.84,7.00: ',4186,.9999,1064

64 DATA RWU10,2,10,7, .2050,.9498,152, .2504,.9687,228, .2874,.9801,304, .3181,.9877,380,
.3619,.9934,532, .4136,.9981,760, .4670,.9995,1064, 2.95,12.00

65 DATA RWU20,2,20,7, .1532,.8983,152, .1957,.9345,228, .2319,.9564,304, .2586,.9669,380,
.3027,.9811,532, .3548,.9896,760, .4035,.9981,1064, 1.94,5.30

66 DATA RWU30,2,30,7, .1031,.8059,152, .1469,.8781,228, .1781,.9126,304, .2050,.9336,380,
.2483,.9583,532, .2976,.9754,760, .3425,.9858,1064, 3.29,2.59

67 DATA RWU40,2,40,7, .0601,.6469,152, .0989,.7711,228, .1282,.8378,304, .1532,.8743,380,
.1947,.9183,532, .2401,.9479,760, .2894,.9687,1064, 3.49,2.11

68 DATA RWU50,2,50,7, .0232,.3862,152, .0569,.6065,228, .0842,.7166,304, .1073,.7817,380,
.1469,.8474,532, .1884,.8992,760, .2391,.9393,1064, 4.04,1.65

69 DATA RWU60,2,60,6, .0211,.3395,228, .0464,.5240,304, .0675,.6223,380, .0999,.7429,532,
.1427,.8272,760, .1884,.8858,1064, 4.41,1.39

70 DATA CWU28,2,28,40,9, .1052,.808,152, .1573,.893,228, .2091,.936,380, .2607,.964,532,
.3119,.979,760, .4136,.992,1520, .5141,.998,2660, .6134,.999,3800, .7117,.999,5320, 3.00,2.91

71 DATA CWU52,2,52,28,10, .0527,.57,228, .1052,.77,380, .1573,.861,608, .2091,.915,912,
.2607,.944,1368, .3119,.966,1900, .4136,.984,3420, .5141,.992,5320, .6134,.994,8360, .7117,.997,10636,
4.81,1.30

72 DATA CWU63,2,63,25,10, .0527,.543,380, .1052,.745,608, .1573,.845,912, .2091,.9,1368,
.2607,.936,1900, .3119,.957,2660, .4136,.979,4560, .5141,.988,7600, .6134,.992,10640,
.7117,.996,13681, 5.76,0.89

73 DATA CWU78,2,78,31,9, .0527,.505,684, .1052,.713,1064, .1573,.821,1520, .2091,.88,2280,
.2607,.921,3040, .3119,.949,3800, .4136,.971,6840, .5141,.981,11400, .6134,.99,15200, 5.51,0.80

74 DATA CWU98,2,97,70,7, .0527,.465,1216, .1052,.674,1900, .1573,.789,2660, .2091,.854,3800,
.2607,.896,5320, .3119,.927,6840, .4136,.955,11400, 4.81,0.84

75 DATA WILS0,2,0,10, .05,.757,17.58, .1,.868,31.02, .15,.9237,50.16, .2,.9557,81.7, .25,.975,134.45,
.3,.9857,217.2, .35,.9914,338.21, .4,.9948,513.5201, .45,.9966,733.31, .5,.9978,1003.26, 6.13,2.12

76 DATA WILS10,2,10,10, .05,.7339,33.09, .1,.848,54.3, .15,.9091,85.32, .2,.9476,138.07,
.25,.9697,221.85, .3,.9822,349.07, .35,.9894,535.24, .4,.9934,793.3, .45,.9956,1119.62, .5,.9971,1513.17,
5.34,2.05

77 DATA WILS21,2,21,1,10, .05,.709,60.5, .1,.826,95.15, .15,.897,149.97, .2,.9385,235.81,
.25,.9635,368.72, .3,.9773,569.37, .35,.9861,856.39, .4,.9912,1243.73, .45,.9943,1726.75,
.5,.9961,2297.16, 4.80,1.90

```

78 DATA WILS32,2,32.2,10,.05,.673,104.46,.1,.8,162.9,.15,.88,249.78,.2,.926,384.24,
.25,.9553,589.54,.3,.9727,891.04,.35,.9827,1317.69,.4,.989,1879.31,.45,.9925,2576.42,.5,.9949,3378,
4.28,1.86
79 DATA WILS43,2,43.3,10,.05,.6409,172.72,.1,.778,265.81,.15,.862,399.23,.2,.9141,601.95,
.25,.9471,909.14,.3,.967,1348.2,.35,.9789,1955.33,.4,.9863,2749.15,.45,.9906,3716.73,
.5,.9935,4819.29,3.83,1.81
80 DATA WILS54,2,54.4,10,.05,.61,278.22,.1,.755,417.33,.15,.844,615.92,.2,.9015,913.79,
.25,.9382,1354.92,.3,.9605,1978.08,.35,.9745,2821.03,.4,.9831,3907.04,.45,.9884,5215.94,
.5,.9918,6697.06,3.50,1.75
81 DATA WILS60,2,60,10,.05,.593,346.48,.1,.742,516.11,.15,.835,756.58,.2,.895,1111.35,
.25,.9331,1631.08,.3,.9572,2364.91,.35,.9721,3350.08,.4,.9814,4612.43,.45,.9871,6114.75,
.5,.9909,7824.44,3.35,1.73
82 DATA MAC60,2,60,9,.1052,.7517,543.0,.2092,.9050,1225.6,.3120,.9597,2347.9,
.4136,.9801,4240.6,.5141,.9906,6981.5,.6135,.9947,10033,.7117,.9966,12825,.8089,.9979,15308,
.9050,.9990,17583,4.43,1.17
85 RESTORE 93
86 INPUT "BACKGROUND: BLACK, COLOR, or WHITE (B/C/W)",B$
87 IF B$="B" OR B$="b" THEN GOTO 90
88 IF B$="W" OR B$="w" THEN GOTO 91
89 B$="C": PALETTE 0,7: PALETTE 14,63: PALETTE 15,0: GOTO 92
90 B$="B": PALETTE 5,38: PALETTE 4,54: GOTO 92
91 B$="W": FOR I=1 TO 15: PALETTE I,0: NEXT I: PALETTE 0,63
92 DIM AP(3,2): FOR J=1 TO 2: READ C$(J): FOR K=1 TO 3: READ AP(K,J): NEXT K: NEXT J
93 'Antoine Coefficients - A,B,C:log P=A-(B/(T+C)) rev.ver. 6/26/97
94 'DATA "NH3-1",7.55466,1002.711,247.885: 'Hirata
95 DATA "NH3-2",7.74396,1113.928,262.741: 'Ohe NIST
96 'DATA "H2O-1",7.96681,1668.210,228.000: 'Hirata H2O-1
97 'DATA "H2O-2",8.10765,1750.286,235.000: 'Hirata H2O-2
98 'DATA "H2O-3",8.07131,1730.630,233.426: 'Gmehling
99 DATA "H2O-4",6.357118,8858.843,607.56335: 'NBS/NRC VapPres EQN Line#550
101 'NH3DATA.DAT

```

□

```

100 'NH3GRID1.BAS: 'NH3DATA.DAT
110 KEY OFF: CLS: READ C1$,C2$,F: DIM SM(120,4),SN(200,4): GOSUB 400
120 DIM X(M,2),Y(M,2),PT(M,2),D(M,2),Y1(M),QC(M),QD(M),QE(M),LP(M,2),R(M)
125 DF$="UN?????. WRY": PRINT TAB(23);DF$" FILES MENU": FILES DF$
130 INPUT "New File?(Y/N)",A$
135 INPUT "Data Set Name (CAPS w/o UN):",NF$: DF$="UN"+NF$+" ". WRY"
140 IF A$="N" OR A$="n" THEN GOTO 750
145 INPUT "Data Set #":NF: GOSUB 400
150 FOR J=1 TO N: READ X(J,1),Y(J,1),D: IF C3=1 THEN PT(J,2)=D ELSE PT(J,1)=D
155 IF C3=1 THEN PT(J,1)=C4 ELSE PT(J,2)=C4
160 X(J,2)=1-X(J,1): Y(J,2)=1-Y(J,1): NEXT J
165 T=PT(1,2): IF C3=1 THEN T=100
175 PRINT DF$,NF$: WHILE INKEY$="": WEND
180 G1B=.1: G1E=12!: G2B=.1: G2E=12!: GS=.1
185 L=0: FOR G1=G1B TO G1E+GS/2 STEP GS: L=L+1
190 MINA=0: MINM=0: MINW=0: FOR G2=G2B TO G2E+GS/2 STEP GS
195 PRINT "W(12)=",G1;"W(21)=",G2;
200 SUMR=0: SUMY=0: SUMT=0: SUM2=0: 'SUM3=0
230 SS=0: SR=0: SY=0: ST=0: FOR K=1 TO N: X=X(K,1): Z=1-X
240 PO=PT(K,1): T=PT(K,2): IF C3=1 THEN T=1.05*T
250 GOSUB 500: Y1=PA/PC: SS=SS+(Y1-Y(K,1))^2: Y1(K)=Y1
260 SR=SR+(X*LOG((Y(K,1)/X)*(X+G1*Z))-X*LOG(P1/PO)+Z*LOG((Y(K,2)/Z)*(G2*X+Z))-
Z*LOG(P2/PO))^2
270 SY=SY+ABS(Y1-Y(K,1)): ST=ST+ABS(T-PT(K,2)): NEXT K
280 SUMR=SR/N: SUMY=SY/N: SUMT=ST/N: SUM2=SQR(SS/N): 'SUM3=(N/SS)
290 PRINT "%D(R^2)=",100*SUMR;"%D(Y1)=",100*SUMY;"D(T)=",SUMT/F;
295 'PRINT "%var=",100*SUM2;"%wtv=",100*SQR(1/SUM3);
320 IF MINA=0 THEN GOSUB 620
325 IF SUMR<MINA THEN GOSUB 620
330 IF MINM=0 THEN GOSUB 630
335 IF SUMY<MINM THEN GOSUB 630
340 'IF MINW=0 OR SUM3<MINW THEN GOSUB 640
360 PRINT "MINA=",MINA,L: NEXT G2: CLS
370 NEXT G1
390 GOTO 700
400 RESTORE 10: READ X$,X$,X
405 FOR I=1 TO F: READ NF$,C3,C4,N
410 IF C3=1 THEN C3$="ISOBAR" ELSE C3$="ISOTHERM"
415 IF N>=M THEN M=N: 'IF I=20 THEN WHILE INKEY$="": WEND
420 FOR J=1 TO N: READ X,X,X: NEXT J: READ X,X: NEXT I
425 'FOR J=1 TO 2: READ C$(J)
430 'FOR K=1 TO 3: READ AP(K,J): NEXT K: NEXT J
435 RESTORE 10: READ X$,X$,X
440 FOR I=1 TO NF: READ NF$,C3,C4,N: IF I<NF THEN GOTO 450
445 NEXT I: RETURN
450 FOR J=1 TO N: READ X,X,X: NEXT J: GOTO 445
500 SP=-1: 'M=0
510 GA=EXP(-LOG(X+G1*Z)+Z*(G1/(X+G1*Z)-(G2/(G2*X+Z))))
520 GB=EXP(-LOG(Z+G2*X)-X*(G1/(X+G1*Z)-(G2/(G2*X+Z))))
530 P1=EXP(LOG(10)*(AP(1,1)-AP(2,1)/(T+AP(3,1))))
540 'P2=EXP(LOG(10)*(AP(1,2)-AP(2,2)/(T+AP(3,2))))
550 TK=T+273.15: P2=(760/1.01325)*EXP(6.357118#-8858.842/TK+607.56335#*TK^-.6)
560 PA=GA*P1*X: PB=GB*P2*Z: PC=PA+PB
570 IF PO=PC THEN RETURN

```

```

580 IF (PC>.995*PT(N,1) AND PC<1.005*PT(N,1)+1) THEN RETURN
590 IF INT(PC+.5)>PT(N,1) THEN 610
600 IF INT(PC+.5)<PT(N,1) THEN SP=SP/10
610 T=T+SP: PO=PC: GOTO 530
620 MINA=SUMR: SN(L,1)=G2: SN(L,2)=100*MINA: RETURN
630 MINM=SUMY: SN(L,3)=G2: SN(L,4)=100*MINM: RETURN
640 'MINW=100*SQR(1/SUM3): SN(L,5)=G2: SN(L,6)=MINW: RETURN
700 OPEN "O",1,DFS: PRINT#1,G1B;
720 FOR I=1 TO 120: FOR J=1 TO 4: PRINT#1,SN(I,J): NEXT J: NEXT I
730 CLOSE
740 GOTO 780
750 OPEN "I",1,DFS: INPUT#1,G1B
760 FOR I=1 TO 120: FOR J=1 TO 4: INPUT#1,SN(I,J): NEXT J: NEXT I
770 CLOSE
780 SC=50
790 CLS: MP=5: IF SC<>10*MP THEN MP=SC/10
800 LINE (20,320)-(620,20),,B
805 LOCATE 24,3: PRINT "0";TAB(40);"W12";TAB(78);"12";
810 LOCATE 1,1: PRINT 10*MP;"xad(R2)v";: COLOR 4
815 PRINT "ad(Y1)";TAB(35): COLOR 15: PRINT DFS:TAB(78);"W21"
820 LOCATE 2,1: PRINT "30";: LOCATE 2,79: PRINT"12";
825 LOCATE 9,1: PRINT "20";: LOCATE 16,1: PRINT "10";
830 LOCATE 23,2: PRINT "0";: LOCATE 23,79: PRINT "0";: LOCATE 1,1
835 FOR X=45 TO 600 STEP 25: LINE (X,20)-(X,320),4: NEXT X
840 FOR Y=45 TO 300 STEP 25: LINE (20,Y)-(620,Y),4: NEXT Y
845 PSET (25,320-25*SN(1,1))
850 FOR X=2 TO 120: LINE-(20+5*X,320-25*SN(X,1)): NEXT X
855 PSET (25,325-MP*SN(1,2)): PSET (25,325-25*SN(1,3)),4
860 FOR X=2 TO 120: LINE-(20+5*X,320-MP*SN(X,2)): NEXT X
865 PSET (25,325-25*SN(1,3)),4
870 FOR X=2 TO 120: LINE-(20+5*X,320-25*SN(X,3)),4: NEXT X
875 PSET (25,325-MP*SN(1,4)),4
880 FOR X=2 TO 120: LINE-(20+5*X,320-MP*SN(X,4)),4: NEXT X
885 WHILE INKEY$="": WEND: GOSUB 1000
890 LOCATE 3,40: PRINT "W12=";RW1;"W21=";RW2;"ad(R2)=";INT(1000*RMIN)/100;"e-3"
895 LOCATE 4,40: PRINT "W12=";YW1;"W21=";YW2;"ad(Y1)=";INT(1000*YMIN)/100;"e-3";
900 LOCATE 5,40: INPUT "ad Scale Factor=";SC
910 IF SC=0 THEN SC=10*MP: LOCATE 5,56: PRINT SC
915 LOCATE 1,60: PRINT DATE$: IF SC<>10*MP THEN GOTO 790
920 CIRCLE (20+50*RW1,320-MP*RMIN),3: CIRCLE (20+50*YW1,320-MP*YMIN),3,4
925 SN=SN(120,2): FOR I=0 TO 5: WHILE INKEY$="": WEND: FOR J=1 TO 20
930 PRINT USING"###.###";(20*I+J)/10;
935 FOR K=1 TO 4: PRINT TAB(14*K);SN(20*I+J,K);
940 NEXT K: IF SN(20*I+J,2)>SN THEN GOTO 950
945 SN=SN(20*I+J,2): W2=SN(20*I+J,1): W1=(20*I+J)/10
950 PRINT: NEXT J
955 PRINT "W12";TAB(14);"W21";TAB(28);"ad(R^2)";TAB(42);"W21";TAB(56);"ad(Y1)"
960 PRINT ST$: NEXT I: END
1000 RMIN=SN(1,2): YMIN=SN(1,4): FOR I=2 TO 120
1002 IF SN(I,2)=>RMIN THEN GOTO 1006
1004 RMIN=SN(I,2): RW2=SN(I,1): RW1=I/10
1006 IF SN(I,4)=>YMIN THEN GOTO 1010
1008 YMIN=SN(I,4): YW2=SN(I,3): YW1=I/10
1010 NEXT I

```

```

1040 ST$="DATA "+NF$+"",
1050 ST$=ST$+STR$(RW1)+", "+STR$(RW2)+", "+STR$(RMIN)+",
1060 ST$=ST$+STR$(YW1)+", "+STR$(YW2)+", "+STR$(YMIN)
1070 RETURN
1300 'Wide Search Minima: File,R^2:W12,W21,ad,Y1:W12,W21,ad
1301 DATA PER0, 4.8, 2.8, .5759744, 7.6, 2.0, .816468
1302 DATA PER10, 4.8, 2.3, .3502365, 5.7, 2.0, .5163352
1303 DATA PER20, 4.4, 2.1, 2.691384E-02, 4.7, 2.0, .2101382
1304 DATA PER30, 4.4, 1.9, 2.912961E-02, 5.1, 1.7, .1550368
1305 DATA PER40, 3.8, 1.9, 4.457645E-02, 4.0, 1.8, .2900283
1306 DATA PER50, 4.5, 1.5, 5.625773E-03, 4.9, 1.4, .1213034
1307 DATA PER60, 6.8, 0.9, 3.161529E-02, 6.8, 0.9, .3793317
1308 DATA C&H60, 3.4, 1.7, .153008, 3.4, 1.7, 1.463768
1309 DATA C&H80, 6.8, 0.7, 2.764933E-02, 6.8, 0.7, .7243648
1310 DATA C&H90, 9.2, 0.3, 1.441937E-02, 5.2, 0.9, .5768719
1311 DATA C&H100, 2.7, 1.5, 1.986452E-03, 5.8, 0.7, .2834352
1312 DATA WIL0A, 6.9, 2.4, 4.406083, 5.5, 3.3, 4.239306E-02
1313 DATA WIL2A, 5.5, 1.7, 1.567156, 4.0, 2.9, 4.698418E-02
1314 DATA WIL4A, 4.2, 1.7, 1.450313, 3.2, 2.5, 7.485688E-02
1315 DATA WIL6A, 3.2, 1.9, 7.912293E-02, 2.9, 2.1, 8.252263E-02
1316 DATA WIL8A, 2.7, 1.9, 1.733454E-03, 2.7, 1.9, .0753522
1317 DATA WIL9A, 2.8, 1.8, 2.946542E-02, 3.0, 1.7, .1372099
1318 DATA KUR41, 4.9, 1.6, .3698942, 4.2, 1.8, 1.00982
1319 DATA KUR61, 5.1, 1.2, 8.458131E-02, 4.4, 1.4, .5672344
1320 DATA KUR81, 7.0, 0.6, 7.168415E-02, 6.4, 0.7, .871706
1321 DATA KUR100, 4.6, 0.9, 7.424834E-03, 1.9, 2.0, .2597058
1322 DATA RIZ32, 7.8, 1.1, 6.072829, 4.7, 2.1, .8784514
1323 DATA RIZ69, 5.9, 1.4, 2.247418, 5.5, 1.7, 1.377835
1324 DATA INO60, 1.1, 3.1, .2026342, 1.4, 2.6, 3.953576E-02
1325 DATA MUL100, 3.5, 1.3, .0154898, 3.5, 1.3, .3145655
1326 DATA HAR100, 4.6, 1.2, 4.541478, 5, 1.5, .3349447
1327 DATA GIL41, 4.7, 1.5, 1.275178, 5.1, 1.5, .2170679
1328 DATA GIL61, 3.8, 1.5, 3.349574E-02, 3.9, 1.5, .2007775
1329 DATA GIL81, 3.5, 1.4, 3.222674E-03, 3.5, 1.4, .1340091
1330 DATA WILS0, 6.2, 2.1, .5124048, 10.8, 1.2, .4111874
1331 DATA WILS10, 5.5, 2.0, .5516643, 8.7, 1.2, .5396616
1332 DATA WILS21, 4.8, 1.9, .4200084, 6.4, 1.3, .6075978
1333 DATA WILS32, 4.2, 1.9, .369371, 6.0, 1.2, .682484
1334 DATA WILS43, 3.9, 1.8, .3166556, 5.3, 1.2, .7322776
1335 DATA WILS54, 3.6, 1.7, .2638428, 4.1, 1.5, .7648313
1336 DATA WILS60, 3.4, 1.7, .2308054, 4, 1.5, .7586135
1337 DATA WUC05, 3.4, 12.0, 3.110825, 3.3, 4.9, .1499365
1339 DATA WUC20, 1.9, 5.5, 5.951576, 4.4, 2.4, .2164083
1340 DATA WUC30, 3.3, 2.6, .2338102, 4.7, 1.9, .2492981
1341 DATA WUC40, 3.5, 2.1, 8.294693E-02, 4.3, 1.8, .4014705
1342 DATA WUC50, 3.9, 1.7, 9.033714E-02, 4.9, 1.4, .665336
1343 DATA WUC60, 4.4, 1.4, 3.624829E-02, 4.7, 1.3, .713037
1344 DATA CUW28, 3.0, 2.9, 1.297065, 4.1, 2.2, .146791
1345 DATA CUW52, 4.8, 1.3, 1.191149, 3.9, 1.7, .1514298
1346 DATA CUW63, 5.7, 0.9, 1.040719, 3.7, 1.6, .151549
1347 DATA CUW78, 5.5, 0.8, .5936061, 3.7, 1.4, .2976173
1348 DATA CUW98, 4.6, 0.9, .1004914, 3.7, 1.2, .2542159
1349 DATA CUW98, 4.6, 0.9, .1004914, 3.7, 1.2, .2542159
1350 DATA MAC60, 4.4, 1.2, 2.121523, 3.6, 1.7, .1173695

```

```

100 'NH3GRID2.BAS
101 'NH3DATA.DAT
110 CLS: RESTORE: READ C1$,C2$,F: DIM SM(120,4),SN(200,4): GOSUB 400
120 DIM X(M,2),Y(M,2),PT(M,2),D(M,2),Y1(M),QC(M),QD(M),QE(M),LP(M,2),R(M)
125 DF$="UN?????.W?2": PRINT TAB(23);DF$ FILES MENU": FILES DF$
130 INPUT "New File?(Y/N)",A$: INPUT "Obj. Fun.?(R/Y)",B$
132 INPUT "Data Set Name (CAPS w/o UN):",NF$
135 IF B$="R" OR B$="r" THEN DF$="UN"+NF$+" .WR2" ELSE DF$="UN"+NF$+" .WY2"
140 IF A$="N" OR A$="n" THEN GOTO 750
145 INPUT "Data Set #:",NF: GOSUB 400
150 FOR J=1 TO N: READ X(J,1),Y(J,1),D: IF C3=1 THEN PT(J,2)=D ELSE PT(J,1)=D
155 IF C3=1 THEN PT(J,1)=C4 ELSE PT(J,2)=C4
160 X(J,2)=1-X(J,1): Y(J,2)=1-Y(J,1): NEXT J
165 T=PT(1,2): IF C3=1 THEN T=100
175 PRINT DF$,NF$: WHILE INKEY$="": WEND
180 PRINT "Step=0.01:W12 Range=2.00"
181 INPUT "W12b,W21b,W21e:",G1B,G2B,G2E: GS=.01: G1E=G1B+2
185 L=0: FOR G1=G1B+GS TO G1E+GS/2 STEP GS: L=L+1
190 MINA=0: MINM=0: MINW=0: FOR G2=G2B TO G2E+GS/2 STEP GS
195 PRINT "W(12)=",G1,"W(21)=",G2;
200 SUMR=0: SUMY=0: SUMT=0: SUM2=0: SUM3=0
230 SR=0: SS=0: SY=0: ST=0: FOR K=1 TO N: X=X(K,1): Z=1-X
240 PO=PT(K,1): T=PT(K,2): IF C3=1 THEN T=1.05*T
250 GOSUB 500: Y1=PA/PC: SS=SS+(Y1-Y(K,1))^2: Y1(K)=Y1
260 SR=SR+(X*LOG((Y(K,1)/X)*(X+G1*Z))-X*LOG(P1/PO)+Z*LOG((Y(K,2)/Z)*(G2*X+Z))-
Z*LOG(P2/PO))^2
270 SY=SY+ABS(Y1-Y(K,1)): ST=ST+ABS(T-PT(K,2)): NEXT K
280 SUMR=SR/N: SUMY=SY/N: SUMT=ST/N: SUM2=SQR(SS/N)
290 PRINT "%D(R^2)=",100*SUMR: "%D(Y1)=",100*SUMY: "D(T)=",SUMT/F,;
320 IF MINA=0 THEN GOSUB 620
325 IF SUMR<MINA THEN GOSUB 620
330 IF MINM=0 THEN GOSUB 630
335 IF SUMY<MINM THEN GOSUB 630
340 IF MINW=0 OR SUM3<MINW THEN GOSUB 640
360 PRINT "MINA=",MINA,L: NEXT G2: CLS
370 NEXT G1
390 GOTO 700
400 RESTORE 10: READ X$,X$,X
405 FOR I=1 TO F: READ NF$,C3,C4,N
410 IF C3=1 THEN C3$="ISOBAR" ELSE C3$="ISOTHERM"
415 IF N>=M THEN M=N: IF I=20 THEN WHILE INKEY$="": WEND
420 FOR J=1 TO N: READ X,X,X: NEXT J: READ X,X: NEXT I
425 'FOR J=1 TO 2: READ C$(J)
430 'FOR K=1 TO 3: READ AP(K,J): NEXT K: NEXT J
435 RESTORE 10: READ X$,X$,X
440 FOR I=1 TO NF: READ NF$,C3,C4,N: IF I<NF THEN GOTO 450
445 NEXT I: RETURN
450 FOR J=1 TO N: READ X,X,X: NEXT J: GOTO 445
500 SP=-1: 'M=0
510 GA=EXP(-LOG(X+G1*Z)+Z*(G1/(X+G1*Z)-(G2/(G2*X+Z))))
520 GB=EXP(-LOG(Z+G2*X)-X*(G1/(X+G1*Z)-(G2/(G2*X+Z))))
530 P1=EXP(LOG(10)*(AP(1,1)-AP(2,1)/(T+AP(3,1))))
540 'P2=EXP(LOG(10)*(AP(1,2)-AP(2,2)/(T+AP(3,2))))
550 TK=T+273.15: P2=(760/1.01325)*EXP(6.357118#-8858.842/TK+607.56335#*TK^-.6)

```

```

560 PA=GA*P1*X: PB=GB*P2*Z: PC=PA+PB
570 IF PO=PC THEN RETURN
580 IF (PC>.995*PT(N,1) AND PC<1.005*PT(N,1)+1) THEN RETURN
590 IF INT(PC+.5)>PT(N,1) THEN 610
600 IF INT(PC+.5)<PT(N,1) THEN SP=SP/10
610 T=T+SP: PO=PC: GOTO 530
620 MINA=SUMR: SN(L,1)=G2: SN(L,2)=100*MINA: RETURN
630 MINM=SUMY: SN(L,3)=G2: SN(L,4)=100*MINM: RETURN
640 'MINW=100*SQR(1/SUM3): SN(L,5)=G2: SN(L,6)=MINW: RETURN
700 OPEN "O",1,DF$: PRINT#1,G1B;
720 FOR I=1 TO 200: FOR J=1 TO 4: PRINT#1,SN(I,J);: NEXT J: NEXT I
730 CLOSE
740 GOTO 790
750 DES="UN"+NF$+"WRY": OPEN "I",1,DES: INPUT #1,Z
755 FOR I=1 TO 120: FOR J=1 TO 4: INPUT#1,SM(I,J): NEXT J: NEXT I
760 CLOSE
770 OPEN "I",1,DF$: INPUT#1,G1B
775 FOR I=1 TO 200: FOR J=1 TO 4: INPUT#1,SN(I,J): NEXT J: NEXT I
780 CLOSE
790 SC=100
795 CLS: MP=10: IF SC<>10*MP THEN MP=SC/10
800 LINE (20,320)-(620,20),,B
805 LOCATE 24,3: PRINT "0";TAB(40);"W12";TAB(78);"12";
810 LOCATE 1,1: PRINT 10*MP;"x";: COLOR 2: PRINT "ad(R2)";: COLOR 5
815 PRINT "ad(Y1)";TAB(35);: COLOR 15: PRINT DF$;TAB(78);"W21"
820 LOCATE 2,1: PRINT "30";: LOCATE 2,79: PRINT "12";
822 LOCATE 9,1: PRINT "20";: LOCATE 9,79: PRINT "8";
824 LOCATE 16,1: PRINT "10";: LOCATE 16,79: PRINT "4";
826 LOCATE 23,2: PRINT "0";: LOCATE 23,79: PRINT "0";: LOCATE 6,1
830 FOR X=45 TO 600 STEP 25: LINE (X,20)-(X,320),9: NEXT X
835 FOR Y=45 TO 300 STEP 25: LINE (20,Y)-(620,Y),9: NEXT Y
840 PSET (25,320-25*SM(1,1)),2
842 FOR X=2 TO 120: LINE-(20+5*X,320-25*SM(X,1)),2: NEXT X
844 PSET (25,320-MP*SM(1,2)),2
846 FOR X=2 TO 120: LINE-(20+5*X,320-MP*SM(X,2)),2: NEXT X
848 PSET (25,320-25*SM(1,3)),5
850 FOR X=2 TO 120: LINE-(20+5*X,320-25*SM(X,3)),5: NEXT X
852 PSET (25,320-MP*SM(1,4)),5
854 FOR X=2 TO 120: LINE-(20+5*X,320-MP*SM(X,4)),5: NEXT X
860 FOR L=1 TO 200: X=G1B+L/100: PSET (20+50*X,320-MP*SN(L,2)),11
870 PSET (20+50*X,320-MP*SN(L,4)),11: NEXT L
880 WHILE INKEY$="": WEND: GOSUB 1000
890 COLOR 5: LOCATE 3,38: PRINT
"W12=",YW1;"W21=",YW2;"ad(Y1)=",INT(1000*YMIN)/100;"e-3"
895 COLOR 2: LOCATE 4,38: PRINT
"W12=",RW1;"W21=",RW2;"ad(R2)=",INT(1000*RMIN)/100;"e-3"
900 COLOR 15: LOCATE 1,60: PRINT DATE$: FOR B=2 TO 4 STEP 2
905 IF B=4 THEN BMIN=YMIN ELSE BMIN=RMIN
910 IF B=4 THEN X=YW1 ELSE X=RW1
915 CIRCLE (20+50*X,320-MP*BMIN),3
920 FOR I=1 TO 200: X=G1B+I/100: PSET (20+50*X,320-MP*SN(I,B)),11: NEXT I
925 NEXT B: LOCATE 5,38: INPUT "ad Scale Factor= ",SC
930 IF SC=0 THEN SC=10*MP: LOCATE 5,54: PRINT SC
935 IF SC<>10*MP THEN GOTO 795

```

```

940 WHILE INKEY$="": WEND: CLS: S$="###.###"
945 FOR J=-10 TO 10: FOR I=1 TO 3 STEP 2: IF I=3 THEN X=YW1 ELSE X=RW1
950 L=100*(X-G1B): IF L+J<1 OR L+J>200 THEN GOTO 980
955 IF I=3 THEN PRINT TAB(40);
960 K=X+J/100: PRINT USING S$;K;: PRINT "   ";
970 PRINT USING S$;SN(L+J,I);: PRINT "   ";SN(L+J,I+1);
980 NEXT I: PRINT: NEXT J
985 PRINT "W12";TAB(12);"W21";TAB(24);"100ad(R2)";
990 PRINT TAB(40);"W12";TAB(52);"W21";TAB(64);"100ad(Y1)";
995 PRINT ST$: END
1000 IF B$="Y" OR B$="y" THEN B$="Y" ELSE B$="R"
1010 RW1=G1B: YW1=G1B: RW2=SN(1,1): YW2=SN(1,3): RMIN=SN(1,2): YMIN=SN(1,4)
1020 FOR I=1 TO 200: IF SN(I,2)=>RMIN THEN GOTO 1040
1030 RMIN=SN(I,2): RW2=SN(I,1): RW1=G1B+(I/100)
1040 IF SN(I,4)=>YMIN THEN GOTO 1060
1050 YMIN=SN(I,4): YW2=SN(I,3): YW1=G1B+(I/100)
1060 NEXT I
1070 ST$="DATA "+NF$+"/"+"B$+"+"+STR$(RW1)+"+"+STR$(RW2)+"+"+STR$(RMIN)+"+"
1080 ST$=ST$+STR$(YW1)+"+"+STR$(YW2)+"+"+STR$(YMIN)
1090 RETURN
1100 'FILE/O.F.,W12,W21,ad(R2),W12,W21,ad(Y1)
1102 DATA PER0/Y, 6.50, 2.23, 1.088571, 7.63, 1.99, .8055508
1104 DATA PER0/R, 4.81, 2.779999, .57305, 5.78, 2.33, .8697856
1106 DATA PER10/Y, 4.93, 2.26, .3325025, 5.99, 1.93, .4856964
1108 DATA PER10/R, 4.93, 2.26, .3324968, 5.79, 1.97, .497517
1110 DATA PER20, 4.63, 2.02, 1.579215E-02, 4.81, 1.97, .2011326
1111 DATA PER20/Y, 4.63, 2.019999, 1.579237E-02, 4.81, 1.969999, .2011326
1112 DATA PER30, 4.56, 1.86, 2.495877E-02, 5.01, 1.72, .1415883
1114 DATA PER40, 3.87, 1.87, 4.196282E-02, 4.27, 1.72, .2481868
1116 DATA PER50, 4.56, 1.49, 2.886118E-03, 4.67, 1.46, .1153926
1118 DATA PER60, 6.9, 0.88, 2.970005E-02, 6.79, 0.90, .3752452
1120 DATA C&H60, 3.51, 1.65, .1496649, 3.27, 1.75, 1.44902
1122 DATA C&H80, 6.47, 0.76, 2.719889E-02, 6.54, 0.74, .72092
1124 DATA C&H90/Y, 6.49, 0.66, 1.444936E-02, 4.98, 0.95, .5515556
1126 DATA C&H90/R, 7.64, 0.49, 1.439457E-02, 7.29, 0.55, .6105
1128 DATA C&H9A/R, 8.26, .41, 1.439985E-02, 8.19, .43, .629567
1129 DATA C&H100/Y, 4.5, .97, 2.221726E-03, 5.95, .67, .2483982
1130 DATA WIL0A/Y, 6.5, 2.5, 4.44496, 5.45, 3.33, 3.094748E-02
1132 DATA WIL0A/R, 7, 2.35, 4.403523, 5.92, 3.17, 6.172583E-02
1134 DATA WIL2A/Y, 5.00, 2.00, 1.653143, 4.00, 2.88, 4.317002E-02
1136 DATA WIL2A/R, 5.49, 1.70, 1.567109, 4.49, 2.59, 8.529966E-02
1138 DATA WIL4A/Y, 4.13, 1.72, 1.448566, 3.14, 2.54, 6.856263E-02
1140 DATA WIL4A/R, 4.13, 1.72, 1.448565, 3.21, 2.50, 7.249892E-02
1142 DATA WIL6A, 3.23, 1.88, 7.867849E-02, 3.01, 2.02, 7.563055E-02
1144 DATA WIL8A, 2.68, 1.92, 1.116663E-03, 2.70, 1.91, 4.343242E-02
1146 DATA WIL9A, 2.77, 1.82, 2.910029E-02, 3.06, 1.67, .1229763
1147 DATA KUR41, 4.91, 1.59, .3688994, 4.19, 1.80, 1.005665
1148 DATA KUR61, 5.12, 1.20, 8.420184E-02, 4.64, 1.33, .5516329
1150 DATA KUR81, 6.94, 0.67, 7.167451E-02, 6.59, 0.67, .8697774
1152 DATA KUR100, 4.33, 0.97, 7.42443E-03, 4.14, 1.02, .2580631
1154 DATA RIZ32/Y, 5.50, 1.63, 6.53327, 4.86, 2.05, .8746216
1156 DATA RIZ32/R, 7.86, 1.09, 6.072671, 6.83, 1.54, .9263492
1158 DATA RIZ69, 5.99, 1.38, 2.246254, 5.65, 1.64, 1.375581
1159 DATA RIZ86A/Y, 5, 1.5, 6.203978, 3.89, 2.309999, 1.031976

```

1160 DATA INO60, 1.13, 3.05, .2016507, 1.39, 2.61, 3.800591E-02
 1162 DATA HAR100, 4.71, 1.17, 4.540321, 5.09, 1.47, .306747
 1163 DATA MUL100, 3.49, 1.29, 1.284829E-02, 3.63, 1.24, .2755231
 1164 DATA GIL41, 4.63, 1.53, 1.273811, 4.80, 1.57, .2121064
 1166 DATA GIL61, 3.77, 1.53, .029613, 3.85, 1.51, .1792682
 1168 DATA GIL81, 3.40, 1.43, 6.416621E-04, 3.44, 1.41, 9.456039E-02
 1170 DATA WILS0/Y, 9.00, 1.47, 2.085276, 10.14, 1.27, .4103929
 1172 DATA WILS0/R, 6.13, 2.12, .5105373, 7.17, 1.67, .4528165
 1174 DATA WILS10/Y, 7.0, 1.59, 1.244984, 7.58, 1.35, .5363047
 1176 DATA WILS10/R, 5.34, 2.05, .5440323, 6.50, 1.53, .5708671
 1178 DATA WILS21/Y, 6.0, 1.53, .8362939, 6.51, 1.27, .604095
 1180 DATA WILS21/R, 4.80, 1.90, .4200074, 5.80, 1.4, .634917
 1182 DATA WILS32/Y, 5.00, 1.60, .5513263, 5.98, 1.20, .6812662
 1184 DATA WILS32/R, 4.28, 1.86, .3664469, 5.10, 1.54, .7242865
 1186 DATA WILS43/Y, 4.30, 1.62, .3983734, 5.42, 1.15, .7302058
 1188 DATA WILS43/R, 3.83, 1.81, .3122814, 4.90, 1.35, .737589
 1190 DATA WILS54/R, 3.50, 1.75, .259682, 4.12, 1.48, .7644671
 1192 DATA WILS60/Y, 3.35, 1.729999, .229116, 3.68, 1.629999, .7549429
 1194 DATA WILS60, 3.35, 1.73, .2291171, 3.68, 1.63, .7549447
 1196 DATA WUC05, 2.84, 7.00, 4.774837, 3.43, 4.58, .1488725
 1198 DATA WUC10/R, 2.95, 12.0, 6.879355, 3.39, 4.09, .1667142
 1200 DATA WUC20/Y, 4.43, 2.39, .2124395, 4.24, 2.50, .2907919
 1202 DATA WUC20/R, 1.94, 5.30, 5.91856, 2.54, 4.50, .5601746
 1204 DATA WUC30/Y, 3.70, 2.33, .3087929, 4.65, 1.91, .2405865
 1206 DATA WUC30/R, 3.29, 2.59, .231849, 4.30, 2.03, .2539439
 1208 DATA WUC40, 3.49, 2.11, 8.281944E-02, 4.40, 1.77, .3996023
 1209 DATA WUC40/Y, 3.5, 2.1, 8.295428E-02, 4.4, 1.77, .3996066
 1210 DATA WUC50, 4.04, 1.65, 8.803184E-02, 4.31, 1.57, .6393545
 1212 DATA WUC60, 4.41, 1.39, 3.539235E-02, 4.52, 1.36, .6705538
 1214 DATA CUW28/Y, 3.10, 2.83, 1.305462, 4.06, 2.21, .1442949
 1216 DATA CUW28/R, 3.00, 2.91, 1.296703, 3.88, 2.28, .1445413
 1218 DATA CUW52/Y, 4.78, 1.31, 1.191125, 3.87, 1.70, .1243043
 1220 DATA CUW52/R, 4.81, 1.30, 1.191092, 3.87, 1.70, .1243037
 1222 DATA CUW63/Y, 4.50, 1.24, 1.173066, 3.81, 1.56, .1385653
 1224 DATA CUW63/R, 5.76, 0.89, 1.040383, 4.92, 1.23, .4218293
 1226 DATA CUW78/Y, 4.50, 1.07, .6786186, 3.42, 1.51, .2351086
 1228 DATA CUW78/R, 5.51, 0.80, .593601, 4.5, 1.16, .4887661
 1230 DATA CUW98/Y, 4.6, 0.90, .100491, 3.63, 1.22, .2497452
 1232 DATA CUW98/R, 4.81, 0.84, 9.830372E-02, 3.63, 1.22, .2497477
 1233 DATA MAC60/R, 4.430001, 1.169999, 2.119713, 3.71, 1.649999, .101263
 1234 DATA P&L760/Y, 11.16, .19, 3.354077E-02, 10.71, .13, .1350659

□

```

100 'NH3GRIDS.BAS
101 'NH3DATA.DAT
110 CLS: RESTORE 10: READ C1$,C2$,F: DIM SM(120,4),SN(200,4),SL(200,4)
115 GOSUB 400
120 DIM X(M,2),Y(M,2),PT(M,2),D(M,2),Y1(M),QC(M),QD(M),QE(M),LP(M,2),R(M)
125 DF$="UN?????.W?2": PRINT TAB(23);DF$ FILES MENU": FILES DF$
130 INPUT "New File?(Y/N)",A$: INPUT "Obj. Fun.?(R/Y)",B$
132 INPUT "Data Set Name (CAPS w/o UN):",NF$
135 IF B$="R" OR B$="r" THEN DF$="UN"+NF$+".WR2" ELSE DF$="UN"+NF$+".WY2"
140 GOTO 750
145 INPUT "Data Set #":NF: GOSUB 400
150 FOR J=1 TO N: READ X(J,1),Y(J,1),D: IF C3=1 THEN PT(J,2)=D ELSE PT(J,1)=D
155 IF C3=1 THEN PT(J,1)=C4 ELSE PT(J,2)=C4
160 X(J,2)=1-X(J,1): Y(J,2)=1-Y(J,1): NEXT J
165 T=PT(1,2): IF C3=1 THEN T=100
175 PRINT DF$,NF$: WHILE INKEY$="": WEND
180 PRINT "Step=0.01: W12 Range=2.00"
181 INPUT "W12b,W21b,W21e:",G1B,G2B,G2E: GS=.01: G1E=G1B+2
185 L=0: FOR G1=G1B+GS TO G1E+GS/2 STEP GS: L=L+1
190 MINA=0: MINM=0: MINW=0: FOR G2=G2B TO G2E+GS/2 STEP GS
195 PRINT "W(12)=",G1;"W(21)=",G2;
200 SUMR=0: SUMY=0: SUMT=0: SUM2=0: 'SUM3=0
230 SR=0: SS=0: SY=0: ST=0: FOR K=1 TO N: X=X(K,1): Z=1-X
240 PO=PT(K,1): T=PT(K,2): IF C3=1 THEN T=1.05*T
250 GOSUB 500: Y1=PA/PC: SS=SS+(Y1-Y(K,1))^2: Y1(K)=Y1
260 SR=SR+(X*LOG((Y(K,1)/X)*(X+G1*Z))-X*LOG(P1/PO)+Z*LOG((Y(K,2)/Z)*(G2*X+Z))-
Z*LOG(P2/PO))^2
270 SY=SY+ABS(Y1-Y(K,1)): ST=ST+ABS(T-PT(K,2)): NEXT K
280 SUMR=SR/N: SUMY=SY/N: SUMT=ST/N: SUM2=SQR(SS/N)
290 PRINT "%D(R^2)=",100*SUMR: "%D(Y1)=",100*SUMY: "D(T)=",SUMT/F:;
320 IF MINA=0 THEN GOSUB 620
325 IF SUMR<MINA THEN GOSUB 620
330 IF MINM=0 THEN GOSUB 630
335 IF SUMY<MINM THEN GOSUB 630
340 IF MINW=0 OR SUM3<MINW THEN GOSUB 640
360 PRINT "MINA=",MINA;L: NEXT G2: CLS
370 NEXT G1
390 GOTO 700
400 RESTORE 10: READ X$,X$,X
405 FOR I=1 TO F: READ NF$,C3,C4,N
406 PRINT I,NF$,:
410 IF C3=1 THEN C3$="ISOBAR" ELSE C3$="ISOTHERM"
415 IF N>=M THEN M=N: IF I=20 THEN WHILE INKEY$="": WEND
420 FOR J=1 TO N: READ X,X,X: NEXT J: READ X,X: NEXT I
425 FOR J=1 TO 2: READ C$(J)
430 FOR K=1 TO 3: READ AP(K,J): NEXT K: NEXT J
435 RESTORE 10: READ X$,X$,X
440 FOR I=1 TO NF: READ NF$,C3,C4,N: IF I<NF THEN GOTO 450
445 NEXT I: WHILE INKEY$="": WEND: RETURN
450 FOR J=1 TO N: READ X,X,X: NEXT J: GOTO 445
500 SP=-1: 'M=0
510 GA=EXP(-LOG(X+G1*Z)+Z*(G1/(X+G1*Z)-(G2/(G2*X+Z))))
520 GB=EXP(-LOG(Z+G2*X)-X*(G1/(X+G1*Z)-(G2/(G2*X+Z))))
530 P1=EXP(LOG(10)*(AP(1,1)-AP(2,1)/(T+AP(3,1))))

```

```

540 'P2=EXP(LOG(10)*(AP(1,2)-AP(2,2)/(T+AP(3,2))))
550 TK=T+273.15: P2=(760/1.01325)*EXP(6.357118#-8858.842/TK+607.56335#*TK^-.6)
560 PA=GA*P1*X: PB=GB*P2*Z: PC=PA+PB
570 IF PO=PC THEN RETURN
580 IF (PC>.995*PT(N,1) AND PC<1.005*PT(N,1)+1) THEN RETURN
590 IF INT(PC+.5)>PT(N,1) THEN 610
600 IF INT(PC+.5)<PT(N,1) THEN SP=SP/10
610 T=T+SP: PO=PC: GOTO 530
620 MINA=SUMR: SN(L,1)=G2: SN(L,2)=100*MINA: RETURN
630 MINM=SUMY: SN(L,3)=G2: SN(L,4)=100*MINM: RETURN
640 'MINW=100*SQR(1/SUM3): SN(L,5)=G2: SN(L,6)=MINW: RETURN
700 OPEN "O",1,DFS: PRINT#1,G1B;
720 FOR I=1 TO 200: FOR J=1 TO 4: PRINT#1,SN(I,J): NEXT J: NEXT I
730 CLOSE
740 GOTO 790
750 DES="UN"+NFS+" WRY": OPEN "I",1,DES: INPUT #1,Z
755 FOR I=1 TO 120: FOR J=1 TO 4: INPUT#1,SM(I,J): NEXT J: NEXT I: CLOSE
760 DFS="UN"+NFS+" WR2"
765 OPEN "I",1,DFS: INPUT#1,G1B
770 FOR I=1 TO 200: FOR J=1 TO 4: INPUT#1,SN(I,J): NEXT J: NEXT I: CLOSE
772 GOSUB 1000: L=100*(YW1-G1B): IF (L>11 AND L<190) THEN GOTO 778
774 'IF (L-10>1 OR L-10<200) THEN GOTO 778
776 DG$="UN"+NFS+" WY2": GOTO 780
778 DG$="UN"+NFS+" WR2"
780 OPEN "I",1,DG$: INPUT#1,G1A
785 FOR I=1 TO 200: FOR J=1 TO 4: INPUT#1,SL(I,J): NEXT J: NEXT I: CLOSE
790 SC=100
795 CLS: MP=10: IF SC<>10*MP THEN MP=SC/10
800 LINE (80,320)-(560,20),,B
805 LOCATE 24,11: PRINT "0";TAB(31);"4";TAB(40);"W12";TAB(51);"8";TAB(70);"12";
810 LOCATE 1,9: PRINT "x";10*MP:TAB(35);"File:";NFS;
815 LOCATE 12,9: PRINT "ad": COLOR 2: LOCATE 13,9: PRINT "R2": COLOR 5
817 LOCATE 14,9: PRINT "Y1": COLOR 15: LOCATE 13,71: PRINT "W21";
820 LOCATE 2,9: PRINT "30": LOCATE 2,71: PRINT "12";
822 LOCATE 9,9: PRINT "20": LOCATE 9,72: PRINT "8";
824 LOCATE 16,9: PRINT "10": LOCATE 16,72: PRINT "4";
826 LOCATE 23,10: PRINT "0": LOCATE 23,72: PRINT "0": LOCATE 6,1
830 FOR X=100 TO 540 STEP 20: LINE (X,20)-(X,320),9: NEXT X
835 FOR Y=45 TO 300 STEP 25: LINE (80,Y)-(560,Y),9: NEXT Y
840 PSET (84,320-25*SM(1,1)),2
842 FOR X=2 TO 120: LINE-(80+4*X,320-25*SM(X,1)),2: NEXT X
844 PSET (84,320-MP*SM(1,2)),2
846 FOR X=2 TO 120: LINE-(80+4*X,320-MP*SM(X,2)),2: NEXT X
848 PSET (84,320-25*SM(1,3)),5
850 FOR X=2 TO 120: LINE-(80+4*X,320-25*SM(X,3)),5: NEXT X
852 PSET (85,320-MP*SM(1,4)),5
854 FOR X=2 TO 120: LINE-(80+4*X,320-MP*SM(X,4)),5: NEXT X
856 WHILE INKEY$="": WEND
860 FOR L=1 TO 200: X=G1B+L/100: PSET (80+40*X,320-MP*SN(L,2)),10: NEXT L
870 FOR L=1 TO 200: X=G1A+L/100: PSET (80+40*X,320-MP*SL(L,4)),10: NEXT L
880 WHILE INKEY$="": WEND: GOSUB 1050
890 COLOR 5: LOCATE 3,30: PRINT
"W12=";YW1;"W21=";YW2;"ad(Y1)=";INT(1000*YMIN)/100;"e-3"

```

```

895 COLOR 2: LOCATE 4,30: PRINT
"W12=",RW1,"W21=",RW2,"ad(R2)=",INT(1000*RMIN)/100,"e-3"
900 COLOR 15: LOCATE 1,60: PRINT DATES:
905 CIRCLE (80+40*YW1,320-MP*YMIN),3
910 CIRCLE (80+40*RW1,320-MP*RMIN),3
915 FOR I=1 TO 200: X=G1B+I/100: PSET (80+40*X,320-MP*SN(I,2)),10: NEXT I
920 FOR I=1 TO 200: X=G1A+I/100: PSET (80+40*X,320-MP*SL(I,4)),10: NEXT I
925 LOCATE 5,38: INPUT "ad x ",SC
930 IF SC=0 THEN SC=10*MP: LOCATE 5,42: PRINT SC
935 IF SC<>10*MP THEN GOTO 795 ELSE LOCATE 1,9: PRINT " ";
940 WHILE INKEY$="": WEND: CLS: S$="###.###"
945 PRINT TAB(14);"W12";TAB(20);"W21";TAB(26);"100ad(R2)";
946 IF B$="B" THEN LPRINT: LPRINT TAB(14);"W12";TAB(20);"W21";TAB(26);"100ad(R2)";
950 PRINT TAB(44);"W12";TAB(50);"W21";TAB(56);"100ad(Y1)"
951 IF B$="B" THEN LPRINT TAB(44);"W12";TAB(50);"W21";TAB(56);"100ad(Y1)"
955 FOR J=-10 TO 10
960 L=100*(RW1-G1B): IF L+J<1 OR L+J>200 THEN GOTO 975
965 K=RW1+J/100: PRINT TAB(12);: PRINT USING S$;K;: PRINT " ";
966 IF B$="B" THEN LPRINT TAB(12);: LPRINT USING S$;K;: LPRINT " ";
970 PRINT USING S$;SN(L+J,1);: PRINT " ";SN(L+J,2);
971 IF B$="B" THEN LPRINT USING S$;SN(L+J,1);: LPRINT " ";SN(L+J,2);
975 L=100*(YW1-G1A): IF L+J<1 OR L+J>200 THEN GOTO 990
980 K=YW1+J/100: PRINT TAB(42);: PRINT USING S$;K;: PRINT " ";
981 IF B$="B" THEN LPRINT TAB(42);: LPRINT USING S$;K;: LPRINT " ";
985 PRINT USING S$;SL(L+J,3);: PRINT " ";SL(L+J,4)
986 IF B$="B" THEN LPRINT USING S$;SL(L+J,3);: LPRINT " ";SL(L+J,4)
990 NEXT J: IF B$="B" THEN LPRINT: LPRINT TAB(14);NFS: LPRINT CHR$(12)
995 WHILE INKEY$="": WEND: CLS: PRINT ST$: PRINT "SAVE after LN#1300"
999 END
1000 RW1=G1B: RW2=SN(1,1): RMIN=SN(1,2): YW1=G1B: YW2=SN(1,3): YMIN=SN(1,4)
1010 FOR I=1 TO 200: IF SN(I,2)=RMIN THEN GOTO 1030
1020 RMIN=SN(I,2): RW2=SN(I,1): RW1=G1B+(I/100)
1030 IF SN(I,4)=YMIN THEN GOTO 1040 ELSE YMIN=SN(I,4)
1035 YW2=SN(I,3): YW1=G1B+(I/100)
1040 NEXT I: RETURN
1050 YW1=G1A: YW2=SL(1,3): YMIN=SL(1,4)
1060 FOR I=1 TO 200: IF SL(I,4)=YMIN THEN GOTO 1070
1065 YMIN=SL(I,4): YW2=SL(I,3): YW1=G1A+(I/100)
1070 NEXT I
1075 ST$="DATA "+NFS+"/"+"RY"+"", "+STR$(RW1)+", "+STR$(RW2)+", "+STR$(RMIN)+",
1080 ST$=ST$+STR$(YW1)+", "+STR$(YW2)+", "+STR$(YMIN)
1090 RETURN
1100 'FILE/O.F.,W12,W21,ad(R2),W12,W21,ad(Y1)
1102 DATA PER0/Y, 6.50, 2.23, 1.088571, 7.63, 1.99, .8055508
1104 DATA PER0/R, 4.81, 2.779999, .57305, 5.78, 2.33, .8697856
1106 DATA PER10/Y, 4.93, 2.26, .3325025, 5.99, 1.93, .4856964
1108 DATA PER10/R, 4.93, 2.26, .3324968, 5.79, 1.97, .497517
1110 DATA PER20, 4.63, 2.02, 1.579215E-02, 4.81, 1.97, .2011326
1112 DATA PER30, 4.56, 1.86, 2.495877E-02, 5.01, 1.72, .1415883
1114 DATA PER40, 3.87, 1.87, 4.196282E-02, 4.27, 1.72, .2481868
1116 DATA PER50, 4.56, 1.49, 2.886118E-03, 4.67, 1.46, .1153926
1118 DATA PER60, 6.9, 0.88, 2.970005E-02, 6.79, 0.90, .3752452
1120 DATA C&H60, 3.51, 1.65, .1496649, 3.27, 1.75, 1.44902
1122 DATA C&H80, 6.47, 0.76, 2.719889E-02, 6.54, 0.74, .72092

```

1124 DATA C&H90/Y, 6.49, 0.66, 1.444936E-02, 4.98, 0.95, .5515556
 1126 DATA C&H90/R, 7.64, 0.49, 1.439457E-02, 7.29, 0.55, .6105
 1128 DATA C&H9A/R, 8.26, .41, 1.439985E-02, 8.19, .43, .629567
 1130 DATA WIL0A/Y, 6.5, 2.5, 4.44496, 5.45, 3.33, 3.094748E-02
 1132 DATA WIL0A/R, 7, 2.35, 4.403523, 5.92, 3.17, 6.172583E-02
 1134 DATA WIL2A/Y, 5.00, 2.00, 1.653143, 4.00, 2.88, 4.317002E-02
 1136 DATA WIL2A/R, 5.49, 1.70, 1.567109, 4.49, 2.59, 8.529966E-02
 1138 DATA WIL4A/Y, 4.13, 1.72, 1.448566, 3.14, 2.54, 6.856263E-02
 1140 DATA WIL4A/R, 4.13, 1.72, 1.448565, 3.21, 2.50, 7.249892E-02
 1142 DATA WIL6A, 3.23, 1.88, 7.867849E-02, 3.01, 2.02, 7.563055E-02
 1144 DATA WIL8A, 2.68, 1.92, 1.116663E-03, 2.70, 1.91, 4.343242E-02
 1146 DATA WIL9A, 2.77, 1.82, 2.910029E-02, 3.06, 1.67, .1229763
 1147 DATA KUR41, 4.91, 1.59, .3688994, 4.19, 1.80, 1.005665
 1148 DATA KUR61, 5.12, 1.20, 8.420184E-02, 4.64, 1.33, .5516329
 1150 DATA KUR81, 6.94, 0.67, 7.167451E-02, 6.59, 0.67, .8697774
 1152 DATA KUR100, 4.33, 0.97, 7.42443E-03, 4.14, 1.02, .2580631
 1154 DATA RIZ32/Y, 5.50, 1.63, 6.53327, 4.86, 2.05, .8746216
 1156 DATA RIZ32/R, 7.86, 1.09, 6.072671, 6.83, 1.54, .9263492
 1158 DATA RIZ69, 5.99, 1.38, 2.246254, 5.65, 1.64, 1.375581
 1160 DATA INO60, 1.13, 3.05, .2016507, 1.39, 2.61, 3.800591E-02
 1162 DATA HAR100, 4.71, 1.17, 4.540321, 5.09, 1.47, .306747
 1163 DATA MUL100, 3.49, 1.29, 1.284829E-02, 3.63, 1.24, .2755231
 1164 DATA GIL41, 4.63, 1.53, 1.273811, 4.80, 1.57, .2121064
 1166 DATA GIL61, 3.77, 1.53, .029613, 3.85, 1.51, .1792682
 1168 DATA GIL81, 3.40, 1.43, 6.416621E-04, 3.44, 1.41, 9.456039E-02
 1170 DATA WILS0/Y, 9.00, 1.47, 2.085276, 10.14, 1.27, .4103929
 1172 DATA WILS0/R, 6.13, 2.12, .5105373, 7.17, 1.67, .4528165
 1174 DATA WILS10/Y, 7.0, 1.59, 1.244984, 7.58, 1.35, .5363047
 1176 DATA WILS10/R, 5.34, 2.05, .5440323, 6.50, 1.53, .5708671
 1178 DATA WILS21/Y, 6.0, 1.53, .8362939, 6.51, 1.27, .604095
 1180 DATA WILS21/R, 4.80, 1.90, .4200074, 5.80, 1.4, .634917
 1182 DATA WILS32/Y, 5.00, 1.60, .5513263, 5.98, 1.20, .6812662
 1184 DATA WILS32/R, 4.28, 1.86, .3664469, 5.10, 1.54, .7242865
 1186 DATA WILS43/Y, 4.30, 1.62, .3983734, 5.42, 1.15, .7302058
 1188 DATA WILS43/R, 3.83, 1.81, .3122814, 4.90, 1.35, .737589
 1190 DATA WILS54/R, 3.50, 1.75, .259682, 4.12, 1.48, .7644671
 1192 DATA WILS60/Y, 3.35, 1.729999, .229116, 3.68, 1.629999, .7549429
 1194 DATA WILS60, 3.35, 1.73, .2291171, 3.68, 1.63, .7549447
 1196 DATA WUC05, 2.84, 7.00, 4.774837, 3.43, 4.58, .1488725
 1198 DATA WUC10/R, 2.95, 12.0, 6.879355, 3.39, 4.09, .1667142
 1200 DATA WUC20/Y, 4.43, 2.39, .2124395, 4.24, 2.50, .2907919
 1202 DATA WUC20/R, 1.94, 5.30, 5.91856, 2.54, 4.50, .5601746
 1204 DATA WUC30/Y, 3.70, 2.33, .3087929, 4.65, 1.91, .2405865
 1206 DATA WUC30/R, 3.29, 2.59, .231849, 4.30, 2.03, .2539439
 1208 DATA WUC40, 3.49, 2.11, 8.281944E-02, 4.40, 1.77, .3996023
 1210 DATA WUC50, 4.04, 1.65, 8.803184E-02, 4.31, 1.57, .6393545
 1212 DATA WUC60, 4.41, 1.39, 3.539235E-02, 4.52, 1.36, .6705538
 1214 DATA CUW28/Y, 3.10, 2.83, 1.305462, 4.06, 2.21, .1442949
 1216 DATA CUW28/R, 3.00, 2.91, 1.296703, 3.88, 2.28, .1445413
 1218 DATA CUW52/Y, 4.78, 1.31, 1.191125, 3.87, 1.70, .1243043
 1220 DATA CUW52/R, 4.81, 1.30, 1.191092, 3.87, 1.70, .1243037
 1222 DATA CUW63/Y, 4.50, 1.24, 1.173066, 3.81, 1.56, .1385653
 1224 DATA CUW63/R, 5.76, 0.89, 1.040383, 4.92, 1.23, .4218293
 1226 DATA CUW78/Y, 4.50, 1.07, .6786186, 3.42, 1.51, .2351086

1228 DATA CUW78/R, 5.51, 0.80, .593601, 4.5, 1.16, .4887661
 1230 DATA CUW98/Y, 4.6, 0.90, .100491, 3.63, 1.22, .2497452
 1232 DATA CUW98/R, 4.81, 0.84, 9.830372E-02, 3.63, 1.22, .2497477
 1233 DATA MAC60/R, 4.430001, 1.169999, 2.119713, 3.71, 1.649999, .101263
 1300 FILE/R, W12, W21, ad(R2), W12, W21, ad(Y1)
 1301 DATA PER0/R, 4.81, 2.779999, .57305, 7.63, 1.989999, .8055508
 1302 DATA PER10/R, 4.93, 2.259999, .3324968, 5.99, 1.929999, .4856964
 1303 DATA PER20/R, 4.63, 2.019999, 1.579215E-02, 4.81, 1.969999, .2011326
 1304 DATA PER30/R, 4.56, 1.859999, 2.495877E-02, 5.01, 1.719999, .1415883
 1305 DATA PER40/R, 3.87, 1.869999, 4.196282E-02, 4.27, 1.719999, .2481868
 1306 DATA PER50/R, 4.56, 1.489999, 2.886118E-03, 4.67, 1.459999, .1153926
 1307 DATA PER60/R, 6.9, .8799994, 2.970005E-02, 6.79, .8999994, .3752452
 1308 DATA WIL0A/R, 7, 2.349999, 4.403523, 5.45, 3.329999, 3.094748E-02
 1309 DATA WIL2A/R, 5.49, 1.699999, 1.567109, 4, 2.879999, 4.317002E-02
 1310 DATA WIL4A/R, 4.13, 1.719999, 1.448565, 3.14, 2.539999, 6.856263E-02
 1311 DATA WIL6A/R, 3.23, 1.879999, 7.867849E-02, 3.01, 2.019999, 7.563055E-02
 1312 DATA WIL8A/R, 2.68, 1.919999, 1.116663E-03, 2.7, 1.909999, 4.343242E-02
 1313 DATA WIL9A/R, 2.77, 1.819999, 2.910029E-02, 3.06, 1.669999, .1229763
 1314 DATA C&H60/R, 3.51, 1.649999, .1496649, 3.27, 1.749999, 1.44902
 1315 DATA C&H80/R, 6.47, .7599996, 2.719889E-02, 6.54, .7399996, .72092
 1316 DATA C&H90/R, 7.64, .4899999, 1.439457E-02, 4.98, .9499994, .5515556
 1317 DATA C&H100/R, 2.37, 1.639999, 1.968277E-03, 5.95, .6699998, .2483982
 1318 DATA KUR41/R, 4.91, 1.589999, .3688994, 4.19, 1.799999, 1.005665
 1319 DATA KUR61/R, 5.12, 1.199999, 8.420184E-02, 4.64, 1.329999, .5516329
 1320 DATA KUR81/R, 6.94, .6099997, 7.167451E-02, 6.59, .6699997, .8697774
 1321 DATA KUR100/R, 4.33, .9699996, 7.42443E-03, 4.14, 1.02, .2580631
 1322 DATA HAR100/R, 4.71, 1.17, 4.540321, 5.09, 1.469999, .306747
 1323 DATA MUL100/R, 3.49, 1.29, 1.284829E-02, 3.63, 1.24, .2755231
 1324 DATA RIZ32/R, 7.86, 1.089999, 6.072671, 4.86, 2.049999, .8746216
 1325 DATA RIZ69/R, 5.99, 1.379999, 2.246254, 5.65, 1.639999, 1.375581
 1326 DATA RIZ86/R, 14.84, .1, 3.757251, 3.89, 2.309999, 1.031976
 1327 DATA INO60/R, 1.13, 3.049999, .2016507, 1.39, 2.61, 3.800591E-02
 1330 DATA WILS0/R, 6.13, 2.12, .5105373, 10.14, 1.269999, .4103923
 1331 DATA WILS10/R, 5.34, 2.05, .5440323, 7.58, 1.349999, .5363047
 1332 DATA WILS21/R, 4.8, 1.899999, .4200074, 6.51, 1.269999, .604095
 1333 DATA WILS32/R, 4.28, 1.859999, .3664469, 5.98, 1.199999, .6812662
 1334 DATA WILS43/R, 3.83, 1.81, .3122814, 5.42, 1.149999, .7302058
 1335 DATA WILS54/R, 3.5, 1.749999, .259682, 4.12, 1.48, .7644671
 1336 DATA WILS60/R, 3.35, 1.729999, .2291171, 3.68, 1.63, .7549447
 1337 DATA WUC05/R, 2.84, 7.000068, 4.774837, 3.43, 4.580013, .1488725
 1338 DATA WUC10/R, 2.95, 12.00018, 6.879355, 3.39, 4.090001, .1667142
 1339 DATA WUC20/R, 1.94, 5.300019, 5.91856, 2.54, 4.5, .5601746
 1340 DATA WUC30/R, 3.29, 2.589999, .231849, 4.65, 1.91, .2405865
 1341 DATA WUC40/R, 3.49, 2.109999, 8.281944E-02, 4.4, 1.77, .3996066
 1342 DATA WUC50/R, 4.04, 1.649999, 8.803184E-02, 4.31, 1.569999, .6393545
 1343 DATA WUC60/R, 4.41, 1.389999, 3.539211E-02, 4.52, 1.359999, .6705562
 1344 DATA CUW28/R, 3, 2.909999, 1.296703, 4.06, 2.209999, .1442949
 1345 DATA CUW52/R, 4.81, 1.299999, 1.191092, 3.87, 1.699999, .1243043
 1346 DATA CUW63/R, 5.76, .8899994, 1.040383, 3.81, 1.56, .1385653
 1347 DATA CUW78/R, 5.51, .7999996, .593601, 3.42, 1.51, .2351086
 1348 DATA CUW98/R, 4.81, .8399995, 9.830372E-02, 3.63, 1.219999, .2497452
 1349 DATA MAC60/R, 4.430001, 1.169999, 2.119713, 3.71, 1.649999, .101263
 1350 DATA GIL41/R, 4.63, 1.53, 1.273811, 4.8, 1.57, .2121064
 1351 DATA GIL61/R, 3.77, 1.53, .029613, 3.85, 1.51, .1792682

1352 DATA GIL81/RV, 3.4, 1.43, 6.416621E-04, 3.44, 1.41, 9.456039E-02
1353 DATA NEU0/RV, 4.56, 3.449999, .2898599, 3.87, 2.859999, 4.61042E-03
1354 DATA NEU20/RV, 10.04, 2.329999, .2297457, 10.47, 1.38, 3.024069E-02
1355 DATA NEU40/RV, 11.5, 3.099999, .380369, 11.59, 2.899999, .1084099
1356 DATA SAK760/RV, 4.26, 1.859999, 4.623747E-02, 4.22, 1.07, 2.117473E-02
1357 DATA P&L760/RV, .93, 2.819999, 2.774934E-02, 10.71, .13, .1350659

□

```

100 'NH3PLOTS.BAS
101 'NH3DATA.DAT
110 RESTORE 10: READ C1$,C2$,F: GOSUB 700
120 DIM X(NM,2),Y(NM,2),PT(NM,2),D(NM,2),QC(NM),QD(NM),QE(NM),LP(NM,2),R(NM)
130 SG1=0: SG2=0: INPUT "File#";NF: NF=NF-1: RESTORE 10: READ X$,X$,X: GOSUB 800
140 FOR J=1 TO N: READ X(J,1),Y(J,1),D
145 IF C3=1 THEN PT(J,2)=D ELSE PT(J,1)=D
150 IF C3=1 THEN PT(J,1)=C4 ELSE PT(J,2)=C4
155 IF LEFT$(C$,1)="6" THEN PT(J,1)=PT(J,1)*750.0617
160 X(J,2)=1-X(J,1): Y(J,2)=1-Y(J,1): NEXT J
170 PRINT C$(1);"/";C$(2);,"X(1)","Y(1)","P1+P2","T"
180 FOR J=1 TO N: PRINT X(J,1),Y(J,1),PT(J,1),PT(J,2): NEXT J
185 Q$="Y": INPUT "Tabulate Pt or Y1?(P/Y)";Q$
190 A$="N": INPUT "Survey? (Y/N)";A$: IF A$="N" OR A$="n" THEN GOTO 250
195 GOTO 250
200 INPUT "W12:begin,end,step";B1,E1,S1: INPUT "W21:begin,end,step";B2,E2,S2
210 LPRINT: LPRINT TAB(35);C$;TAB(65);DATE$
220 'LPRINT " W12 W21 adY1 adT adPt beseY"
230 FOR G1=B1 TO E1 STEP S1: FOR G2=B2 TO E2 STEP S2
240 GOTO 260
250 PRINT C$: INPUT "W12,W21";G1,G2
260 'CLS: PRINT: PRINT "FILE:";C$: PRINT DATE$
262 CLS: LOCATE 1,35: PRINT "FILE:";C$: 'PRINT DATE$
270 'LINE (100,0)-(540,320),,B
272 LINE (170,20)-(500,320),,B
280 'FOR J=1 TO N: FOR R=1 TO 3: CIRCLE (100+440*X(J,1),320-320*Y(J,1)),R
282 FOR J=1 TO N: FOR R=1 TO 3: CIRCLE (170+330*X(J,1),320-300*Y(J,1)),R
290 NEXT R: NEXT J
300 'LINE (100,320)-(540,20): GOSUB 600
302 LINE (170,320)-(500,20): GOSUB 600
310 T=PT(1,2): IF C3=1 THEN T=100: '1.05*T:No noticeable effect sometimes?
315 'IF Q$="Y" OR Q$="y" THEN GOTO 321
320 'LOCATE 17-N,27: PRINT "PT(i) PTcalc T(i) Tcalc P(1)": GOTO 330
321 'LOCATE 17-N,27: PRINT "Y1(i) Y1calc T(i) Tcalc P(1)"
330 FOR X=1/(1000) TO .75 STEP 1/(1000): Z=1-X
340 T=PT(1,2): PO=0: GOSUB 500: Y1=PA/PC
345 'LOCATE 12,22: PRINT "T=";T;"X=";X;"PO:PC=";PO;PC;"
350 PSET (170+330*X,320-300*Y1): NEXT X
360 SS=0: SY=0: ST=0: DA=0: FOR K=1 TO N: X=X(K,1): Z=1-X
370 PO=PT(K,1): T=PT(K,2): IF C3=1 THEN T=1.05*T: 'T=100 less sensitive
380 GOSUB 500: Y1=PA/PC: SS=SS+(Y1-Y(K,1))^2
390 SY=SY+ABS(Y1-Y(K,1)): ST=ST+ABS(T-PT(K,2))
400 PSET (170+330*X,320-300*Y1),10
402 CIRCLE (170+330*X,320-300*Y1),3
405 'IF Q$="Y" OR Q$="y" THEN GOTO 411
410 'LOCATE 17-N+K,25: PRINT
PT(K,1);TAB(35);INT(10*PC+.5)/10;TAB(43);INT(10*PT(K,2)+.5)/10;TAB(50);INT(10*T)/10;TAB(57);
INT(10*PA+.5)/10: GOTO 420
411 'LOCATE 17-N+K,25: PRINT
Y(K,1);TAB(35);INT(10000*Y1+.5)/10000;TAB(43);INT(10*PT(K,2)+.5)/10;TAB(50);INT(10*T)/10;T
AB(57);INT(10*PA+.5)/10
412 'IF K=1 AND PA>140 AND PA<160 THEN F1=1
413 'IF F1=1 AND K=3 AND PA>280 AND PA<320 THEN LPRINT G1,G2
414 'IF K=1 AND PA<140 THEN G2=10

```

```

415 'IF K=1 OR K=3 OR K=5 THEN LPRINT INT(PA+.5),;
420 DA=DA+ABS(PT(K,1)-PC): NEXT K
421 F1=0
425 LOCATE 18,30: PRINT "W(12)=";G1;TAB(50);"W(21)=";G2
430 LOCATE 19,30: PRINT "Avg. Dev. of Y1=";SY/N
440 LOCATE 20,30: PRINT "Avg. Dev. of T=";ST/N
450 LOCATE 21,30: PRINT "Avg. Dev. of P(tot)="; DA/N
460 LOCATE 22,30: PRINT "BESE(Y)=";SQR(SS/N): 'PRINT "Least Squares (SQ)=";SQ
470 WHILE INKEY$="": WEND: CLS
475 IF A$="N" OR A$="n" THEN END: 'GOTO 250
480 'LPRINT USING "#####.#####";G1,G2,SY/N,ST/N,DA/N,SQR(SS/N)
485 'LPRINT G1,G2
490 NEXT G2: CLS: NEXT G1: END
500 M=0: SP=-1: '-.1
505 'LOCATE 23,1: PRINT "T=";T,"X=";X,"PO:PC=";PO;PC;
510 GA=EXP(-LOG(X+G1*Z)+Z*(G1/(X+G1*Z)-(G2/(G2*X+Z))))
520 GB=EXP(-LOG(Z+G2*X)-X*(G1/(X+G1*Z)-(G2/(G2*X+Z))))
530 P1=EXP(LOG(10)*(AP(1,1)-AP(2,1)/(T+AP(3,1))))
540 'P2=EXP(LOG(10)*(AP(1,2)-AP(2,2)/(T+AP(3,2))))
545 TK=T+273.15: P2=(760/1.01325)*EXP(6.357118#-8858.842/TK+607.56335#*TK^-.6)
550 PA=GA*P1*X: PB=GB*P2*Z: PC=PA+PB
555 'LOCATE 23,1: PRINT "T=";T,"X=";X,"PO:PC=";PO;PC;"
557 'WHILE INKEY$="": WEND
559 IF PO=0 THEN RETURN: 'PO=Ptot for points but =0 for curve
560 IF PO=PC THEN C=15: RETURN
565 IF (PC>.995*PT(N,1) AND PC<1.005*PT(N,1)+1) THEN RETURN
566 'IF J=2 AND (PC>.999*PT(N,1) AND PC<1.001*PT(N,1)+1) THEN RETURN
570 IF INT(PC+.5)>PT(N,1) THEN 590
580 IF INT(PC+.5)<PT(N,1) THEN SP=-SP/10
590 T=T+SP: PO=PC: GOTO 530
600 'LOCATE 1,12: PRINT "1": LOCATE 11,9: PRINT "Y(1)";: LOCATE 23,12
602 LOCATE 2,21: PRINT "1": LOCATE 13,18: PRINT "Y(1)";: LOCATE 23,21
610 'PRINT "0";: LOCATE 24,1: PRINT TAB(12-LEN(C$(2)));C$(2);" 0";
612 PRINT "0";: LOCATE 24,22: PRINT "0 H20";
620 LOCATE 24,41: PRINT "X(1)";TAB(59);
630 PRINT "NH3 1";: LOCATE 1,1
640 'FOR Y=0 TO 320 STEP 32: LINE (100,Y)-(110,Y): LINE (530,Y)-(540,Y): NEXT Y
642 FOR Y=20 TO 320 STEP 30: LINE (170,Y)-(180,Y): LINE (490,Y)-(500,Y): NEXT Y
650 'FOR X=100 TO 540 STEP 44: LINE (X,320)-(X,310): LINE (X,0)-(X,10): NEXT X
652 FOR X=170 TO 500 STEP 33: LINE (X,320)-(X,310): LINE (X,20)-(X,30): NEXT X
660 RETURN
700 PRINT "SYSTEM:(1)";C1$;"-(2)";C2$: PRINT "FILE NUMBER","FILE NAME",,"# DATA"
705 'LPRINT "SYSTEM:(1)";C1$;"-(2)";C2$
710 FOR I=1 TO F: READ NF$,C3,C4,N: IF C3=1 THEN C3$="ISOBAR" ELSE C3$="ISOTHERM"
715 IF N>=NM THEN NM=N: 'IF I=20 THEN WHILE INKEY$="": WEND
720 PRINT I,NF$,C3$,"@";C4,N: IF I=20 OR I=40 THEN WHILE INKEY$="": WEND
725 'LPRINT I,NF$,C3$,"@";C4,N;" pts"
730 FOR J=1 TO N: READ X,X,X: NEXT J: READ X,X: NEXT I: 'DIM AP(3,2)
740 'FOR J=1 TO 2: READ C$(J)
745 'FOR K=1 TO 3: READ AP(K,J): NEXT K: NEXT J
750 RETURN: 'RESTORE: LOCATE 24,10: INPUT "ENTER FILE NUMBER";NF: READ X$,X$,X
800 FOR I=0 TO NF: READ C$,C3,C4,N: IF I<NF THEN GOTO 820
810 NEXT I: RETURN
820 FOR J=1 TO N: READ X,X,X: NEXT J: READ X,X: GOTO 810

```

```

100 'NH3LISTS.BAS
101 'NH3DATA.DAT
110 SCREEN 0: KEY OFF: CLS: RESTORE 10: READ C1$,C2$,F: GOSUB 700
120 DIM X(NM,2),Y(NM,2),PT(NM,2),D(NM,2),QC(NM),QD(NM),QE(NM),LP(NM,2),R(NM)
130 SG1=0: SG2=0: INPUT "File#";NF: NF=NF-1: RESTORE 10: READ X$,X$,X: GOSUB 800
140 FOR J=1 TO N: READ X(J,1),Y(J,1),D
145 IF C3=1 THEN PT(J,2)=D ELSE PT(J,1)=D
150 IF C3=1 THEN PT(J,1)=C4 ELSE PT(J,2)=C4
155 IF LEFT$(C$,1)="6" THEN PT(J,1)=PT(J,1)*750.0617
160 X(J,2)=1-X(J,1): Y(J,2)=1-Y(J,1): NEXT J: READ G1,G2
170 PRINT C$(1);"/";C$(2);,"X(1)","Y(1)","P1+P2","T"
180 FOR J=1 TO N: PRINT ,X(J,1),Y(J,1),PT(J,1),PT(J,2): NEXT J
190 T=PT(1,2)
200 V2=18.02/(.001*(999.83952#+16.945176#*T-.0079870401#*T^2-
.000046170461#*T^3+.00000010556302#*T^4-2.8054253D-10*T^5)/(1+.01689785#*T)): 'H2O Kell
205 V1=17.03*(4.283+.813055*SQR(133-T)-.0082861*(133-T))/(1+.424805*SQR(133-
T)+.015938*(133-T)): 'NH3 -70<=T,C<=130
210 T=T+273.16
215 DEC=(V2/V1)^2*EXP(-9.472201+.061719*T-7.8545E-05*T^2)
220 SEC=EXP(11.825-.049979*T+5.972E-05*T^2)
225 G3=SQR(SEC*DEC): G4=SQR(SEC/DEC)
230 DEC=(V2/V1)^2*EXP(-1.176553+1.042338E-02*T)
235 SEC=EXP(5.517418-1.097737E-02*T)
240 G5=SQR(SEC*DEC): G6=SQR(SEC/DEC)
245 PRINT C$: F$="Grid Search Wijs"
250 PRINT "1. Gridsearch Best Wijs(12,21):",G1,G2
255 PRINT "2. f(S) Curved Fit Wijs(12,21):",G3,G4,
260 PRINT "3. f(S) Linear Fit Wijs(12,21):",G5,G6
265 PRINT "4. Enter Wijs": INPUT "Select 1,2,3 or 4: ",EF
270 ON EF GOTO 290,275,280,285
275 G1=G3: G2=G4: F$="f(S) Curved Fit Wijs": GOTO 290
280 G1=G5: G2=G6: F$="f(S) Linear Fit Wijs": GOTO 290
285 INPUT "W12,W21";G1,G2
290 CLS: PRINT: PRINT TAB(10);"FILE:";C$;TAB(50);F$: ;TAB(55);DATES
300 PRINT "      X1(i)  Pt(i)  Pt(c) %dPt ";
310 PRINT "      Y1(i)  Y1(c)  T(i)  T(c)  P1(c)"
320 RP=0: SR=0: SP=0: SS=0: SY=0: ST=0: DA=0: FOR K=1 TO N: X=X(K,1): Z=1-X
330 PO=PT(K,1): T=PT(K,2): IF C3=1 THEN T=1.05*T: "T=100 less sensitive
340 GOSUB 500: Y1=PA/PC: SS=SS+(Y1-Y(K,1))^2
350 SR=SR+(X*LOG((Y(K,1)/X)*(X+G1*Z))-X*LOG(P1/PO)+Z*LOG((Y(K,2)/Z)*(G2*X+Z))-
Z*LOG(P2/PO))^2
360 SY=SY+ABS(Y1-Y(K,1)): ST=ST+ABS(T-PT(K,2))
370 DP=ABS(PT(K,1)-PC): RP=RP+DP/PT(K,1)
380 PRINT TAB(9);: PRINT USING "#.####";X;: PRINT USING
"#####.#",PT(K,1);INT(10*PC+.5)/10;: PRINT USING "###.###";INT(1000*((DP/PT(K,1))+.0005))/10;
390 PRINT USING "####.####",Y(K,1);INT(10000*Y1+.5)/10000;: PRINT USING
"#####.#";INT(10*PT(K,2)+.5)/10;INT(10*T)/10;: PRINT USING "#####.#";INT(10*PA+.5)/10
400 IF K=21 THEN WHILE INKEY$="": WEND: CLS
410 DA=DA+DP: NEXT K: IF N=19 THEN WHILE INKEY$="": WEND: CLS
420 F1=0
425 PRINT TAB(20);"W(12)=",G1;TAB(40);"W(21)=",G2
430 PRINT TAB(20);"BESE(Y)=",: PRINT USING "###.####",SQR(SS/N);
440 PRINT TAB(40);"a.d.(Y1)=",: PRINT USING "###.####",SY/N
450 PRINT TAB(20);"a.d.ABS(Pt)=",: PRINT USING "#####.#",DA/N;

```

```

455 PRINT TAB(40);"a.d.REL(Pt)="; PRINT USING "###.###"; RP/N
460 PRINT TAB(20);"R^2/N="; PRINT USING "#.#####";SR/N;
465 PRINT TAB(40);"a.d.(T)="; PRINT USING "###.###";ST/N
470 WHILE INKEY$="": WEND: CLS
480 INPUT "Form Feed?(Y/N)";Q$: IF Q$="Y" OR Q$="y" THEN LPRINT CHR$(12)
490 END
500 M=0: SP=-1: '-.1
505 'LOCATE 23,1: PRINT "T=";T,"X=";X,"PO:PC=";PO:PC;
510 GA=EXP(-LOG(X+G1*Z)+Z*(G1/(X+G1*Z)-(G2/(G2*X+Z))))
520 GB=EXP(-LOG(Z+G2*X)-X*(G1/(X+G1*Z)-(G2/(G2*X+Z))))
530 P1=EXP(LOG(10)*(AP(1,1)-AP(2,1)/(T+AP(3,1))))
540 'P2=EXP(LOG(10)*(AP(1,2)-AP(2,2)/(T+AP(3,2))))
545 TK=T+273.15: P2=(760/1.01325)*EXP(6.357118#-8858.842/TK+607.56335#*TK^-.6)
550 PA=GA*P1*X: PB=GB*P2*Z: PC=PA+PB
560 IF PO=PC THEN RETURN
565 IF (PC>.995*PT(N,1) AND PC<1.005*PT(N,1)+1) THEN RETURN
570 IF INT(PC+.5)>PT(N,1) THEN 590
580 IF INT(PC+.5)<PT(N,1) THEN SP=-SP/10
590 T=T+SP: PO=PC: GOTO 530
600 LOCATE 1,12: PRINT "1": LOCATE 11,9: PRINT "Y(1)"; LOCATE 23,12
610 PRINT "0"; LOCATE 24,1: PRINT TAB(12-LEN(C$(2)));C$(2);" 0";
620 LOCATE 24,40: PRINT "X(1)";TAB(68);
630 PRINT "1 ";C$(1); LOCATE 1,1
640 FOR Y=0 TO 320 STEP 32: LINE (100,Y)-(110,Y): LINE (530,Y)-(540,Y): NEXT Y
650 FOR X=100 TO 540 STEP 44: LINE (X,320)-(X,310): LINE (X,0)-(X,10): NEXT X
660 RETURN
700 PRINT "SYSTEM:(1)";C1$;"-(2)";C2$: PRINT "FILE NUMBER","FILE NAME",,"# DATA"
705 'LPRINT "SYSTEM:(1)";C1$;"-(2)";C2$
710 FOR I=1 TO F: READ NF$,C3,C4,N: IF C3=1 THEN C3$="ISOBAR" ELSE C3$="ISOTHERM"
715 IF N>=NM THEN NM=N: 'IF I=20 THEN WHILE INKEY$="": WEND
720 PRINT I,NF$,C3$,"@";C4,N: IF I=20 OR I=40 OR I=60 THEN WHILE INKEY$="": WEND
725 'LPRINT I,NF$,C3$,"@";C4,N;" pts"
730 FOR J=1 TO N: READ X,X,X: NEXT J: READ X,X: NEXT I: 'DIM AP(3,2)
740 'FOR J=1 TO 2: READ C$(J)
745 'FOR K=1 TO 3: READ AP(K,J): NEXT K: NEXT J
750 RETURN: 'RESTORE: LOCATE 24,10: INPUT "ENTER FILE NUMBER";NF: READ X$,X$,X
800 FOR I=0 TO NF: READ C$,C3,C4,N: IF I<NF THEN GOTO 820
810 NEXT I: RETURN
820 FOR J=1 TO N: READ X,X,X: NEXT J: READ X,X: GOTO 810

```

```

100 'NH3FIGS.BAS
101 'NH3DATA.DAT
110 CLS: RESTORE 10: READ C1$,C2$,F: GOSUB 700: AS=35/48
111 PRINT TAB(10);"Q2";TAB(20);"Q3";TAB(30);"Q4";TAB(40);"Q5";TAB(50);"Xmax"
112 PRINT "FIGURE 3: 2";TAB(21);"2";TAB(31);"2 Y";TAB(50);"0.25"
113 PRINT "FIGURE 4: 2";TAB(21);"2";TAB(31);"1";TAB(50);"0.75"
114 PRINT "FIGURE 6: 2";TAB(21);"4";TAB(31);"1";TAB(41);"2";TAB(50);"0.75"
115 PRINT "FIGURE 7: 2";TAB(21);"4";TAB(31);"1";TAB(41);"1";TAB(50);"0.75"
116 PRINT "FIGURE 8: 2";TAB(21);"3";TAB(31);"1";TAB(50);"0.75"
117 PRINT "FIGURE 9: 2";TAB(21);"5";TAB(31);"3";TAB(50);"0.40"
118 PRINT "FIGURE 9i: 2";TAB(21);"5";TAB(31);"3";TAB(50);"0.05"
120 INPUT "Q2:f(S): 1.Linear 2.Curved: ";Q2
130 INPUT "Q3:Data Set: 1.PTXY 2.PTXY+ 3.Sec 4.Smooth 5.PNH3vsM: ";Q3
140 INPUT "Q4: 1.log Ptot 2.Y(NH3) 3.log PNH3(#5): ";Q4
150 IF Q4=2 THEN INPUT "Omit Wilson & Rizvi?(Y/N)";Q4$: IF Q4$="y" THEN Q4$="Y"
160 IF Q3=4 THEN INPUT "Q5: 1. Wucherer 2.Wilson 3. Both: ";Q5
170 F=30: DIM F$(F): INPUT "Max. X: ",MX: GOSUB 600: CLS
180 FOR I=1 TO 2: FOR T=0 TO 100 STEP 10: IF Q3<4 THEN GOTO 195
190 IF Q3=5 THEN GOTO 197 ELSE IF Q5=2 THEN GOTO 193 ELSE IF Q5=3 THEN GOTO 198
191 IF T=0 THEN T=5 ELSE IF T=15 THEN T=10 ELSE IF T=70 THEN T=52 ELSE IF T=62 THEN
T=63 ELSE IF T=73 THEN T=78 ELSE IF T=88 THEN T=28 ELSE IF T=38 THEN T=98
192 GOTO 198
193 IF T>10 AND T<60 THEN T=T+1 ELSE IF T=64 THEN T=60 ELSE IF T=>70 THEN T=100
194 GOTO 198
195 IF Q3<>3 THEN GOTO 198 ELSE IF T=30 THEN T=35 ELSE IF T=45 THEN T=40 ELSE IF
T=70 THEN T=75 ELSE IF T=85 THEN T=80
196 GOTO 198
197 IF T=20 THEN T=18 ELSE IF T=28 THEN T=25 ELSE IF T>40 THEN T=100
198 TC=T: IF Q4=2 THEN LOCATE 4,5+T/2: COLOR 1+T/10: PRINT TC: GOTO 200
199 LOCATE 23,20+T/2: COLOR 1+T/10: PRINT TC:
200 V2=18.02/(.001*(999.83952#+16.945176#*T-.0079870401#*T^2-
.000046170461#*T^3+.00000010556302#*T^4-2.8054253D-10*T^5)/(1+.01689785#*T)): 'H2O Kell
201 V1=17.03*(4.283+.813055*SQR(133-T)-.0082861*(133-T))/(1+.424805*SQR(133-
T)+.015938*(133-T)): 'NH3 -70<=T,C<=130
202 COLOR 15: TK=TC+273.16
210 IF Q2=2 THEN GOTO 213
211 DEC=(V2/V1)^2*EXP(-1.176553+1.042338E-02*TK)
212 SEC=EXP(5.517418-1.097737E-02*TK): GOTO 215
213 DEC=(V2/V1)^2*EXP(-9.472201+.061719*TK-7.8545E-05*TK^2)
214 SEC=EXP(11.825-.0499797*TK+5.972E-05*TK^2)
215 G1=SQR(SEC*DEC): G2=SQR(SEC/DEC)
220 IF T=>10 OR I>1 THEN GOTO 310
230 IF Q4=1 OR Q4=3 THEN GOTO 270
240 LINE (30,30)-(630,330),,B
250 LOCATE 25,76: IF Q3<>5 THEN PRINT "1.0"; ELSE PRINT "0.0";
260 LOCATE 25,35: PRINT "Y(NH3)"; LOCATE 25,5: PRINT "0";
265 LOCATE 12,2: PRINT "X"; LOCATE 13,2: PRINT "NH3"; LOCATE 24,3: PRINT "0";
266 LOCATE 3,1: PRINT INT(100*MX)/100;
267 GOTO 310
270 LINE (30,0)-(630,330),,B
280 LOCATE 1,1: PRINT "4.0"; LOCATE 12,1: PRINT "Log"; LOCATE 13,1: IF Q4=1 THEN PRINT
"Ptot"; ELSE PRINT "PNH3";
281 LOCATE 8,1: PRINT "3.0"; LOCATE 16,1: PRINT "2.0"; LOCATE 24,1: PRINT "1.0";
290 LOCATE 1,1: IF Q3<>5 THEN PRINT "4.0"; ELSE PRINT "2.85";

```

```

291 LOCATE 8,1: IF Q3<>5 THEN PRINT "3.0"; ELSE PRINT "1.85";
292 LOCATE 16,1: IF Q3<>5 THEN PRINT "2.0"; ELSE PRINT "0.85";
293 LOCATE 24,1: IF Q3<>5 THEN PRINT "1.0"; ELSE PRINT "-.15";
295 FOR K=2 TO 3: LINE (30,440-110*K)-(630,440-110*K): NEXT K
296 FOR K=1 TO 2: LINE (30+200*K,0)-(30+200*K,330): NEXT K
300 LOCATE 25,35: PRINT "X(NH3)";: LOCATE 25,76: PRINT INT(100*MX)/100;
305 LOCATE 25,5: PRINT "0";
310 IF I=2 THEN GOTO 390
320 IF B$="W" THEN ST=MX/100 ELSE ST=MX/1000
321 'IF B$="W" THEN ST=.005 ELSE ST=.0005
330 FOR X=ST TO MX STEP ST: Z=1-X
340 GOSUB 500: Y1=PA/PC
350 IF Q4=1 THEN PSET (600*X/MX+30,440-110*(LOG(PC)/LOG(10))),1+T/10
351 'IF Q4=2 THEN PSET (600*X/MX+30,330-300*Y1),1+T/10
352 IF Q4=2 THEN PSET (600*Y1+30,330-300*X/MX),1+T/10
353 'IF Q4=3 THEN PSET (600*X/MX+30,330-110*(LOG(PA)/LOG(10))),1+T/10
354 IF Q4=3 THEN PSET (600*X/MX+30,317-110*(LOG(PA)/LOG(10))),1+T/10
360 NEXT X
390 NEXT T: NEXT I: LOCATE 13,1
400 RESTORE 11: F=25
401 IF Q3=2 THEN F=F+2
402 IF Q3=3 THEN F=12: RESTORE 47
403 IF Q3=2 THEN F=F+2
404 IF Q3=4 THEN F=20: RESTORE 61
405 IF Q3=5 THEN F=10: RESTORE 800: 'RESTORE 8?? Neuhausen PNH3 F=F+3
406 IF Q5=1 THEN F=12: RESTORE 61
407 IF Q5=2 THEN F=7: RESTORE 73
408 'YP=330-110*LOG(760)/LOG(10): IF Q4=3 THEN LINE (30,YP)-(630,YP),,,&HFF00
410 FOR I=1 TO F: READ F$(I),Z,T,N: IF Z=1 THEN P=T
415 QP=ASC(LEFT$(F$(I),1))-64: QC=T/10: IF QC>10 THEN QC=10: 'ASC(MID$(F$(I),4,1))-48
420 FOR J=1 TO N: READ X,Y: IF Z=2 THEN READ P ELSE READ T
425 IF Q3=5 THEN GOSUB 750
430 IF X>MX THEN GOTO 470
435 IF QP=3 THEN QP=10 ELSE IF QP=18 THEN QP=12 ELSE IF QP=23 THEN QP=15 ELSE IF
QP=19 THEN QP=9
440 IF Q4=1 THEN XO=600*X/MX+30: YO=440-110*(LOG(P)/LOG(10)): IF QC>10 THEN QC=10
441 IF Q4=3 THEN XO=600*X/MX+30: YO=317-110*(LOG(P)/LOG(10)): IF QC>10 THEN QC=10
442 'IF Q3=5 THEN YO=330-110*(LOG(P)/LOG(10))
443 IF QR$="y" THEN QR$="Y" ELSE IF QR$="n" THEN QR$="N"
444 'IF Q4=2 THEN XO=600*X/MX+30: YO=330-300*Y: GOTO 446: 'IF QC>10 THEN QC=10:
GOTO 446
445 IF Q4=2 THEN XO=600*Y+30: YO=330-300*X/MX: 'IF QC>10 THEN QC=10
446 XO=XO-3: YO=YO-3: IF Q4=2 THEN GOTO 449
447 IF YO>330 THEN YO=335
448 IF YO<0 THEN YO=335
449 IF Q4$="Y" AND (QP=12 OR QP=15) THEN GOTO 470
450 ON QP-6 GOSUB 630,631,632,633,634,635,636,637,638,639
455 CIRCLE (XO+3,YO+3),4,QC+1,,,1: CT=CT+1
460 CS=CS+1
470 NEXT J: READ Z,Z: WHILE INKEY$="": WEND: NEXT I: GOTO 485
480 'NEXT T: NEXT I: LOCATE 13,1: GOTO 400: 'moved to 390 GOTO 480
485 IF Q4=2 THEN LOCATE 5,5 ELSE LOCATE 20,60: 'PRINT CT"/"/,CS:
490 PRINT CT;"/"/CS
495 WHILE INKEY$="": WEND: CLS: END

```

```

500 M=0: SP=-1: '-.1
505 'LOCATE 23,1: PRINT "T=";T,"X=";X,"PO:PC=";PO;PC;
510 GA=EXP(-LOG(X+G1*Z)+Z*(G1/(X+G1*Z)-(G2/(G2*X+Z))))
520 GB=EXP(-LOG(Z+G2*X)-X*(G1/(X+G1*Z)-(G2/(G2*X+Z))))
530 P1=EXP(LOG(10)*(AP(1,1)-AP(2,1)/(T+AP(3,1))))
540 'P2=EXP(LOG(10)*(AP(1,2)-AP(2,2)/(T+AP(3,2))))
545 TK=T+273.15: P2=(760/1.01325)*EXP(6.357118#-8858.842/TK+607.56335#*TK^-6)
550 PA=GA*P1*X: PB=GB*P2*Z: PC=PA+PB
560 RETURN: 'IF PO=PC THEN RETURN
565 IF (PC>.995*PT(N,1) AND PC<1.005*PT(N,1)+1) THEN RETURN
570 IF INT(PC+.5)>PT(N,1) THEN 590
580 IF INT(PC+.5)<PT(N,1) THEN SP=SP/10
590 T=T+SP: PO=PC: GOTO 530
600 RESTORE 900: 'SYMPPOINT.BAS
601 I=25: DIM PC(I),PG(I),PH(I),PI(I),PK(I),PM(I),PN(I),PP(I),PR(I),PW(I)
602 INPUT "Turn Symbols? (Y/N)";QR$
603 CLS: FOR I=1 TO 10: IF QR$="Y" OR QR$="y" THEN GOTO 607
604 XO=10*I: YO=40: FOR Y=1 TO 5: FOR X=1 TO 5: READ P
605 IF P=1 THEN PSET (XO+X,YO+Y)
606 NEXT X: NEXT Y: GOTO 610
607 XO=10*I+6: YO=46: FOR X=1 TO 5: FOR Y=1 TO 5: READ P
608 IF P=1 THEN PSET (XO-X,YO+Y)
609 NEXT Y: NEXT X: XO=XO-6: 'YO=YO+5
610 ON I GOSUB 620,621,622,623,624,625,626,627,628,629
612 NEXT I: RETURN
614 GOSUB 600: FOR I=1 TO 10: COLOR I: XO=10*I: YO=300
616 ON I GOSUB 630,631,632,633,634,635,636,637,638,639
618 COLOR 15: NEXT I: END
620 GET (XO,YO)-(XO+5,YO+5),PC: PUT (XO+350,YO),PC: RETURN
621 GET (XO,YO)-(XO+5,YO+5),PG: PUT (XO+350,YO),PG: RETURN
622 GET (XO,YO)-(XO+5,YO+5),PH: PUT (XO+350,YO),PH: RETURN
623 GET (XO,YO)-(XO+5,YO+5),PI: PUT (XO+350,YO),PI: RETURN
624 GET (XO,YO)-(XO+5,YO+5),PK: PUT (XO+350,YO),PK: RETURN
625 GET (XO,YO)-(XO+5,YO+5),PM: PUT (XO+350,YO),PM: RETURN
626 GET (XO,YO)-(XO+5,YO+5),PN: PUT (XO+350,YO),PN: RETURN
627 GET (XO,YO)-(XO+5,YO+5),PP: PUT (XO+350,YO),PP: RETURN
628 GET (XO,YO)-(XO+5,YO+5),PR: PUT (XO+350,YO),PR: RETURN
629 GET (XO,YO)-(XO+5,YO+5),PW: PUT (XO+350,YO),PW: RETURN
630 PUT (XO,YO),PG,PSET: RETURN: PUT (XO,137-35/W2(I)),PG: RETURN
631 PUT (XO,YO),PH,PSET: RETURN: PUT (XO,137-35/W2(I)),PH: RETURN
632 PUT (XO,YO),PI,PSET: RETURN: PUT (XO,137-35/W2(I)),PI: RETURN
633 PUT (XO,YO),PC,PSET: RETURN: PUT (XO,137-35/W2(I)),PC: RETURN
634 PUT (XO,YO),PK,PSET: RETURN: PUT (XO,137-35/W2(I)),PK: RETURN
635 PUT (XO,YO),PR,PSET: RETURN: PUT (XO,137-35/W2(I)),PR: RETURN
636 PUT (XO,YO),PM,PSET: RETURN: PUT (XO,137-35/W2(I)),PM: RETURN
637 PUT (XO,YO),PN,PSET: RETURN: PUT (XO,137-35/W2(I)),PN: RETURN
638 PUT (XO,YO),PW,PSET: RETURN: PUT (XO,137-35/W2(I)),PW: RETURN
639 PUT (XO,YO),PP,PSET: RETURN: PUT (XO,137-35/W2(I)),PP: RETURN
700 FOR I=1 TO F: READ NF$,C3,C4,N: IF C3=1 THEN C3$="ISOBAR" ELSE C3$="ISOTHERM"
710 IF N>NM THEN NM=N
720 'PRINT I,NF$,C3$,"@",C4,N: IF I=20 OR I=40 THEN WHILE INKEY$="": WEND
730 FOR J=1 TO N: READ X,X,X: NEXT J: READ X,X: NEXT I: 'DIM AP(3,2)
740 RETURN
750 IF QP=8 THEN GOTO 795

```

```

755 IF QP=13 THEN GOTO 790
760 P1=999.65+.20438*TC-.061744*SQR(TC^3)
770 P2=P1+X*(-6.88-.01989*TC+9.711E-05*TC^2+SQR(X^3)*(.1843-.004392*TC-1.12E-06*TC^2))
780 X=100*X*17.03/P2
790 X=(X/17.03)/((100-X)/18.015+(X/17.013))
795 RETURN
800 'Morgan&Maas,Isotherm Code(2),TC,N:Wt%(NH3),Molar,P(torr)...,BestW12,W21
801 DATA
"M&M25",2,25,12,.404,.237,3.1,1.042,0.608,8.4,3.732,2.154,23.8,5.259,3.016,44.3,7.456,4.328,66.6,9.5
17,5.364,90.9,11.51,6.436,117.4,15.22,8.389,176.0,18.61,10.13,245.6,23.20,12.42,367.6,27.30,14.42,516
.3,30.97,16.15,686.7,5.424,1.794
802 DATA
"M&M18",2,18,13,.397,.233,2.1,1.168,.683,7.0,3.109,1.801,18.1,5.421,3.113,33.5,7.632,4.343,49.6,9.72
9,5.492,67.2,13.61,7.565,108.2,17.24,9.461,156.1,20.55,11.15,214.0,23.54,12.64,279.3,27.69,14.66,395.
1,31.42,16.44,531.7,34.73,17.97,687.3
803 DATA 5.778,1.851
804 DATA
"M&M10",2,10,16,.213,.125,1.0,.448,.263,2.1,1.221,.714,4.8,3.162,1.835,12.4,5.475,3.149,22.7,7.626,4.
349,33.8,9.705,5.491,46.0,11.68,6.560,59.2,15.35,8.511,88.2,18.72,10.26,124.0,21.95,11.91,167.3,25.00,
13.42,221.5,27.78,14.79,280.3
805 DATA 30.38,16.03,347.3,33.92,17.72,462.7,36.12,18.74,542.7,6.218,1.923
806 DATA
"M&M0",2,0,12,0.419,0.246,1.5,1.072,.628,2.9,3.882,2.249,7.0,6.241,3.583,14.3,8.474,4.827,20.0,10.56,
5.970,27.2,14.51,8.095,44.6,19.76,10.84,77.5,24.42,13.20,120.5,28.58,15.26,177.1,32.28,17.06,243.8,35.
60,18.64,321.8,6.827,2.019
810 'Scheffer & DeWij: Isotherm Code(2),N,...MOL/L NH3,NH4+,pNH3 torr
811 DATA "S&D",2,25,14,.0618,1.06e-3,.791,.1433,1.61e-3,1.83,.1883,1.84e-3,2.41,.2236,2.01e-
3,2.89,.339,2.47e-3,4.41,.442,2.75e-3,5.80,.601,3.11e-3,7.96,.773,3.41e-3,10.31,.898,3.55e-3,11.91
812 DATA 1.005,0,13.46,1.167,0,15.75,1.242,0,16.94,1.515,0,20.86,1.618,0,22.38,5.424,1.794: 'MOL/L
NH3,NH4+,pNH3 torr Scheffer & DeWij
820 'Hougen:Isotherm Code(2),N,...X,PNH3
821 DATA "H35",2,35,1,.0185,0,22.1,1,1
822 DATA "H27",2,27,1,.0185,0,14.8,1,1
823 DATA "H25",2,25,5,.0092,0,6.5,.0185,0,13.5,.0634,0,48.5,.1344,0,120.1,.1865,0,173.9,1,1
824 DATA "H23",2,23,1,.0185,0,12.1,1,1
825 DATA "H15",2,14.6,1,.0185,0,7.6,1,1
900 'Character Set
901 DATA 0,1,1,1,1,1,0,0,0,0,1,0,0,0,0,1,0,0,0,0,1,1,1,1: 'C
902 DATA 0,1,1,1,1,1,0,0,0,0,1,0,0,1,1,1,0,0,0,1,0,1,1,0: 'G
903 DATA 1,0,0,0,1,1,0,0,0,1,1,1,1,1,1,0,0,0,1,1,0,0,0,1: 'H
904 DATA 1,1,1,1,1,0,0,1,0,0,0,0,1,0,0,0,1,0,0,1,1,1,1,1: 'I
905 DATA 1,0,0,0,1,1,0,1,1,0,1,1,0,0,0,1,0,1,1,0,1,0,0,0,1: 'K
906 DATA 1,0,0,0,1,1,1,0,1,1,1,0,1,0,1,1,0,0,0,1,1,0,0,0,1: 'M
907 DATA 1,0,0,0,1,1,1,0,0,1,1,0,1,0,1,1,0,0,1,1,1,0,0,0,1: 'N
908 DATA 1,1,1,1,0,1,0,0,0,1,1,1,1,1,0,1,0,0,0,0,1,0,0,0,0: 'P
909 DATA 1,1,1,1,1,1,0,0,0,1,1,1,1,1,0,1,0,1,0,0,1,0,0,1,1: 'R
910 DATA 1,0,0,0,1,1,0,0,0,1,1,0,1,0,1,1,1,0,1,1,1,0,0,0,1: 'W

```

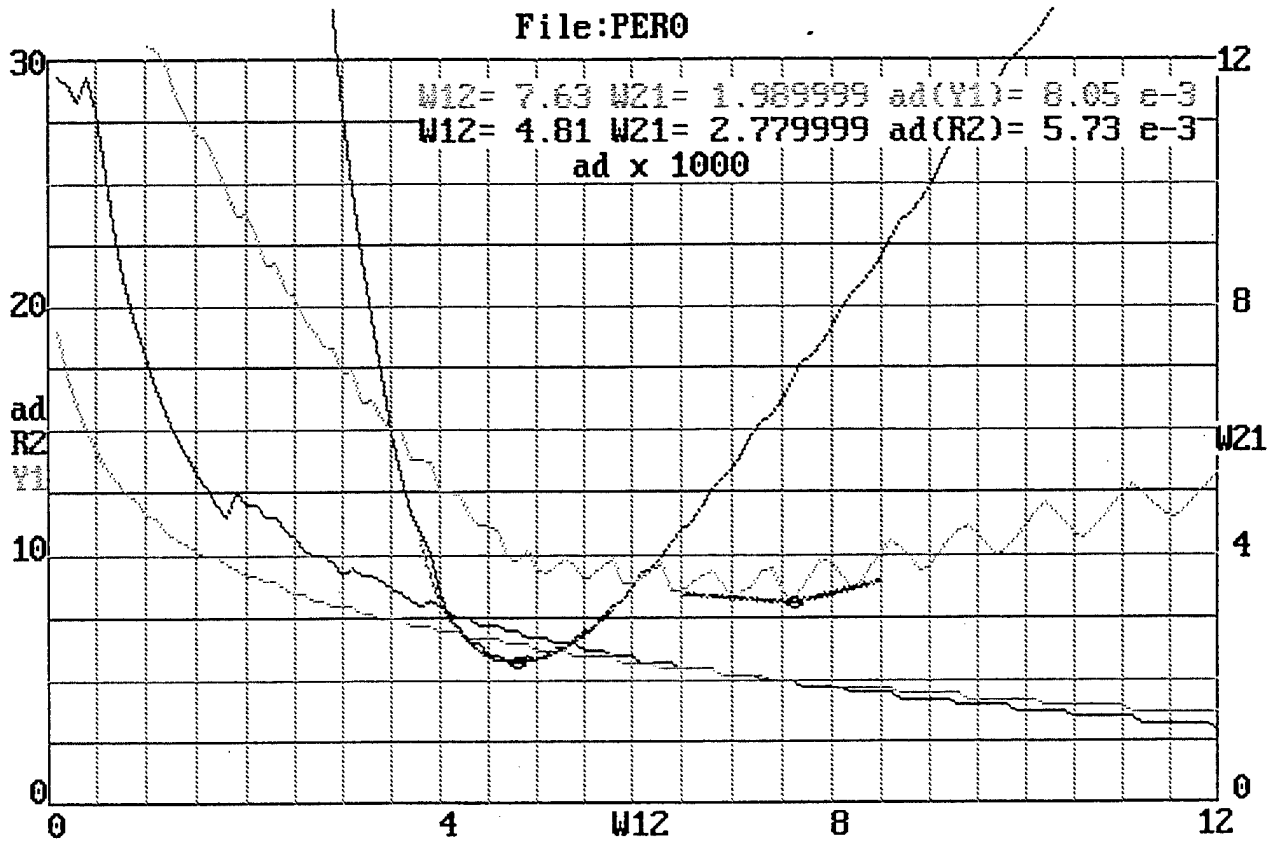
```

1000 'Program to Calculate Vapor Pressure as f(T)
1010 PRINT: FOR T=18 TO 26 STEP 2: TK=T+273.2
1020 V2=18.02/(.001*(999.83952#+16.945176#*T-.0079870401#*T^2-
.000046170461#*T^3+.00000010556302#*T^4-2.8054253D-10*T^5))/(1+.01689785#*T)): 'H2O Kell
1030 V1=17.03*(4.283+.813055*SQR(133-T)-.0082861*(133-T))/(1+.424805*SQR(133-
T)+.015938*(133-T)): 'NH3 -70<=T,C<=130
1040 DEC=(V2/V1)^2*EXP(-9.472201+.061719*TK-7.8545E-05*TK^2)
1050 SEC=EXP(11.825-.049979*TK+5.972E-05*TK^2)
1060 G1=SQR(SEC*DEC): G2=SQR(SEC/DEC)
1070 FOR X=0 TO .1 STEP .01
1080 Z=1-X: GOSUB 500: Y1=PA/PC
1090 PRINT "T=";T,"XA=";: PRINT USING "###";X;: PRINT "YA=";: PRINT USING "###";Y1;:
PRINT "PA=";: PRINT USING "###";PA;: PRINT "PW=";: PRINT USING "###";PB
1100 NEXT X: WHILE INKEY$="": WEND: CLS: NEXT T

```

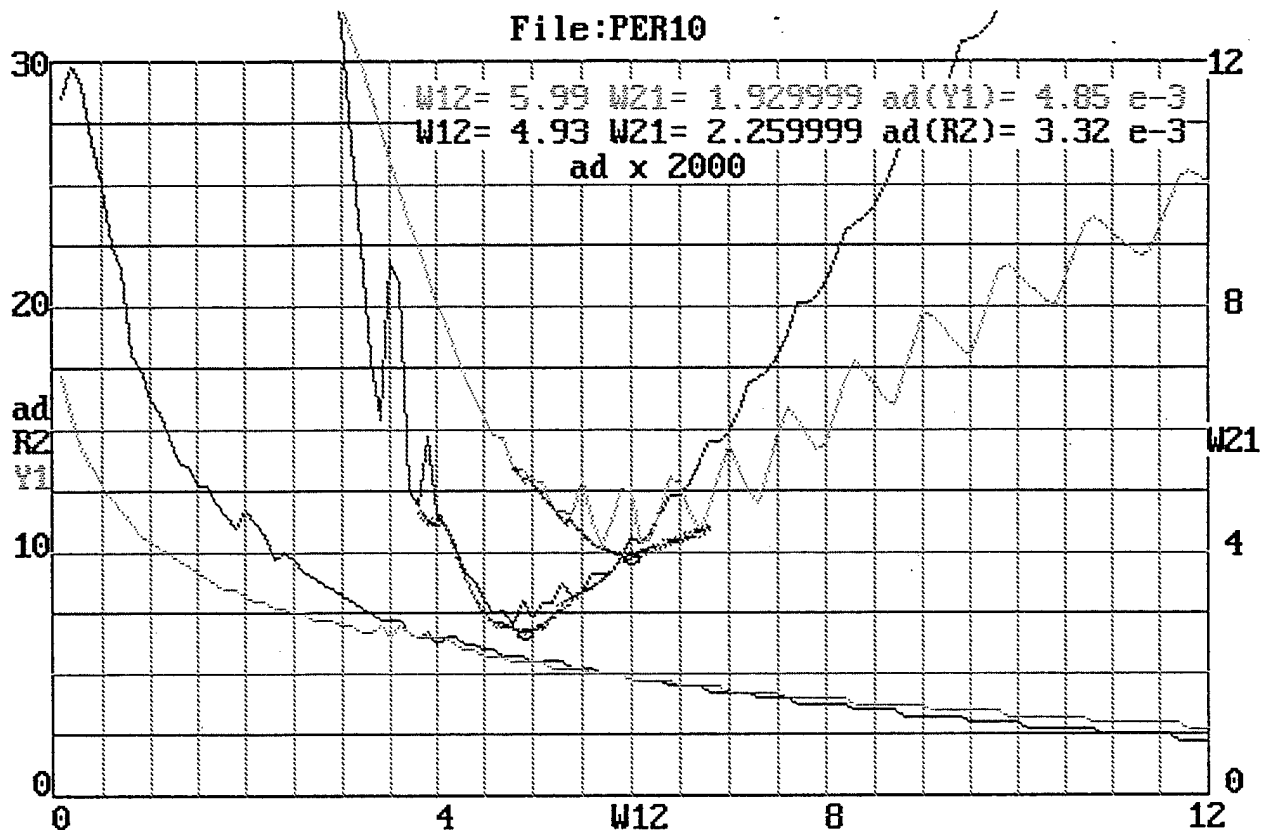
Blank

APPENDIX B
WILSON COEFFICIENT MINIMA



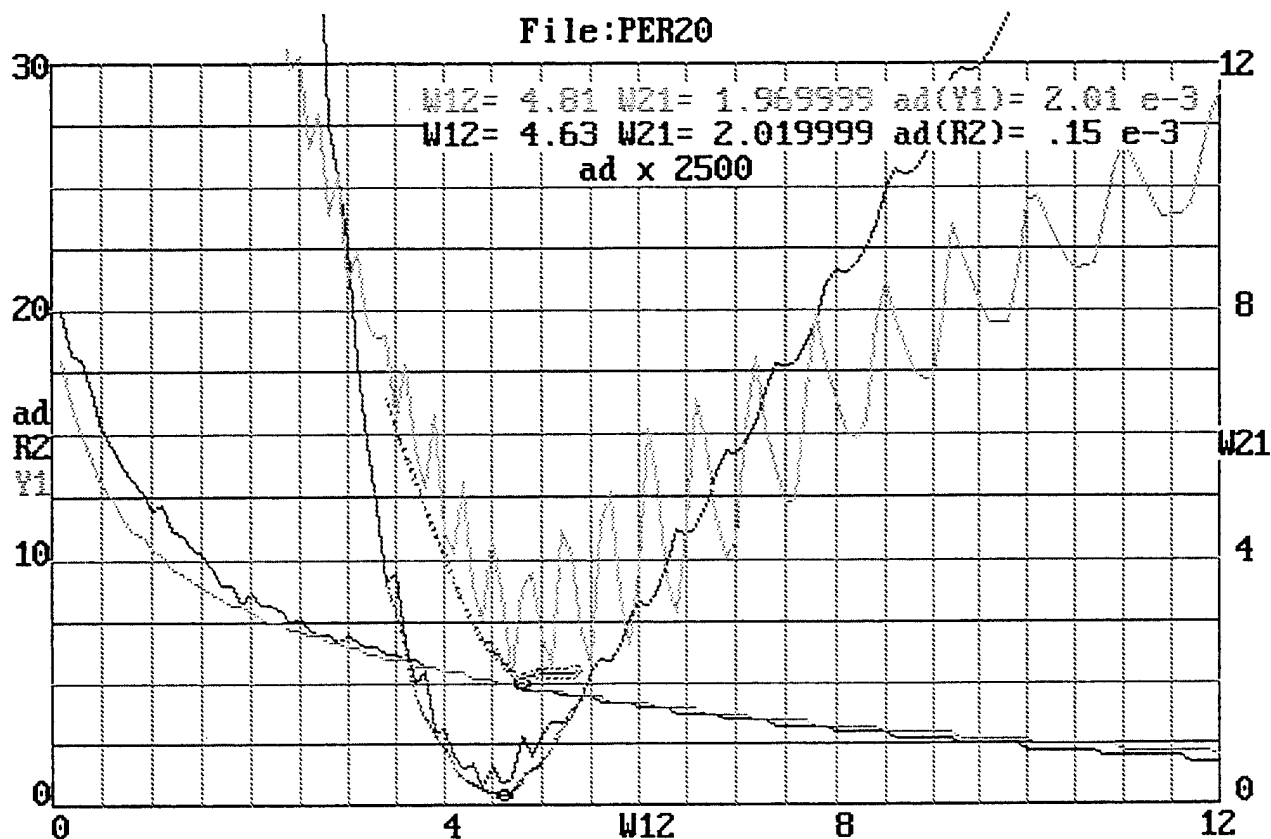
W12	W21	100ad(R2)	W12	W21	100ad(Y1)
4.71	2.82	.5749745	7.53	2.01	.8144426
4.72	2.81	.5747846	7.54	2.01	.8167315
4.73	2.81	.5741475	7.55	2.01	.8190215
4.74	2.81	.5739106	7.56	2.00	.8106423
4.75	2.80	.5736415	7.57	2.00	.8077574
4.76	2.80	.5733317	7.58	2.00	.8100331
4.77	2.80	.5734133	7.59	2.00	.8123065
4.78	2.79	.5730703	7.60	2.00	.8164823
4.79	2.79	.5730722	7.61	1.99	.8202982
4.80	2.78	.5731286	7.62	1.99	.8115101
4.81	2.78	.57305	7.63	1.99	.8055508
4.82	2.78	.5733499	7.64	1.99	.8096373
4.83	2.77	.5733421	7.65	1.99	.815301
4.84	2.77	.573554	7.66	1.99	.8209611
4.85	2.76	.5739615	7.67	1.98	.8215785
4.86	2.76	.5740788	7.68	1.98	.8144975
4.87	2.76	.5745718	7.69	1.98	.8091748
4.88	2.75	.5749186	7.70	1.98	.8139158
4.89	2.75	.575311	7.71	1.98	.8195436
4.90	2.75	.5760743	7.72	1.98	.8251679
4.91	2.74	.5763786	7.73	1.97	.828054

PER0



W12	W21	100ad(R2)	W12	W21	100ad(Y1)
4.83	2.31	.3379555	5.89	1.95	.4904598
4.84	2.30	.3381257	5.90	1.95	.4918317
4.85	2.30	.3360608	5.91	1.95	.4931996
4.86	2.29	.336827	5.92	1.95	.498276
4.87	2.29	.3345584	5.93	1.94	.4899363
4.88	2.28	.3359338	5.94	1.94	.4868528
4.89	2.28	.3334571	5.95	1.94	.4888723
4.90	2.27	.3354567	5.96	1.94	.495252
4.91	2.27	.3327669	5.97	1.93	.4985492
4.92	2.26	.3354027	5.98	1.93	.4873226
4.93	2.26	.3324968	5.99	1.93	.4856964
4.94	2.25	.3357866	6.00	1.93	.4920334
4.95	2.25	.3326594	6.01	1.93	.4983674
4.96	2.24	.3366113	6.02	1.92	.4963716
4.97	2.24	.3332609	6.03	1.92	.4893929
4.98	2.23	.3378937	6.04	1.92	.488618
4.99	2.23	.3343145	6.05	1.92	.4949113
5.00	2.22	.3396407	6.06	1.92	.5011976
5.01	2.22	.3358289	6.07	1.91	.5003602
5.02	2.21	.3418653	6.08	1.91	.4942457
5.03	2.21	.3378179	6.09	1.91	.4912665

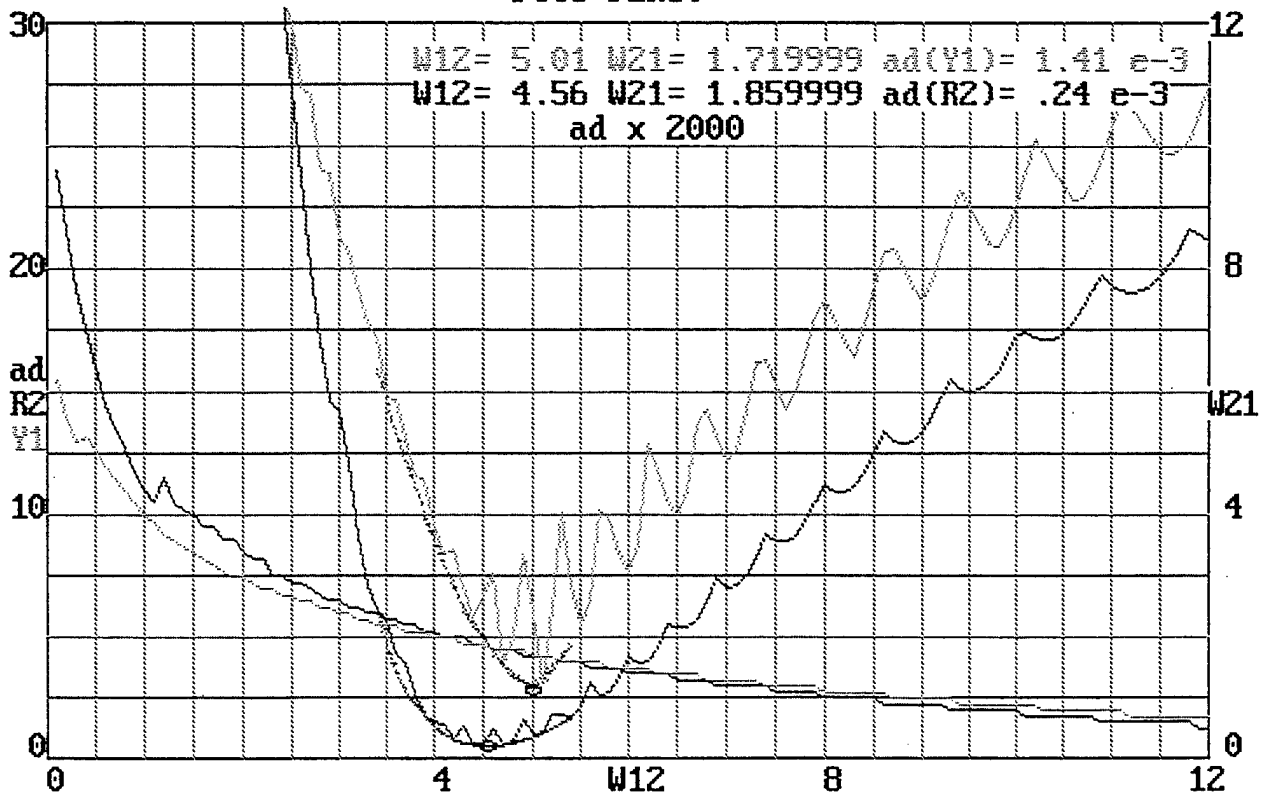
PER10



W12	W21	100ad(R2)	W12	W21	100ad(Y1)
4.53	2.06	1.859506E-02	4.71	2.00	.2130674
4.54	2.05	1.798018E-02	4.72	2.00	.2196385
4.55	2.05	1.754209E-02	4.73	1.99	.2076732
4.56	2.05	1.751801E-02	4.74	1.99	.2057658
4.57	2.04	1.701286E-02	4.75	1.99	.213633
4.58	2.04	1.663329E-02	4.76	1.98	.2111375
4.59	2.04	1.666343E-02	4.77	1.98	.2016366
4.60	2.03	1.628482E-02	4.78	1.98	.2074632
4.61	2.03	1.595374E-02	4.79	1.98	.2152695
4.62	2.02	1.648849E-02	4.80	1.97	.2078162
4.63	2.02	1.579215E-02	4.81	1.97	.2011326
4.64	2.01	1.726081E-02	4.82	1.97	.2088918
4.65	2.01	1.619608E-02	4.83	1.96	.2142231
4.66	2.00	1.861833E-02	4.84	1.96	.2048645
4.67	2.00	1.718112E-02	4.85	1.96	.2023558
4.68	1.99	2.057761E-02	4.86	1.96	.2100574
4.69	1.99	1.876437E-02	4.87	1.95	.21157
4.70	1.98	2.315572E-02	4.88	1.95	.2022836
4.71	1.98	2.096305E-02	4.89	1.95	.2139542
4.72	1.97	2.637018E-02	4.90	1.94	.2184954
4.73	1.97	.0237943	4.91	1.94	.2199259

PER20

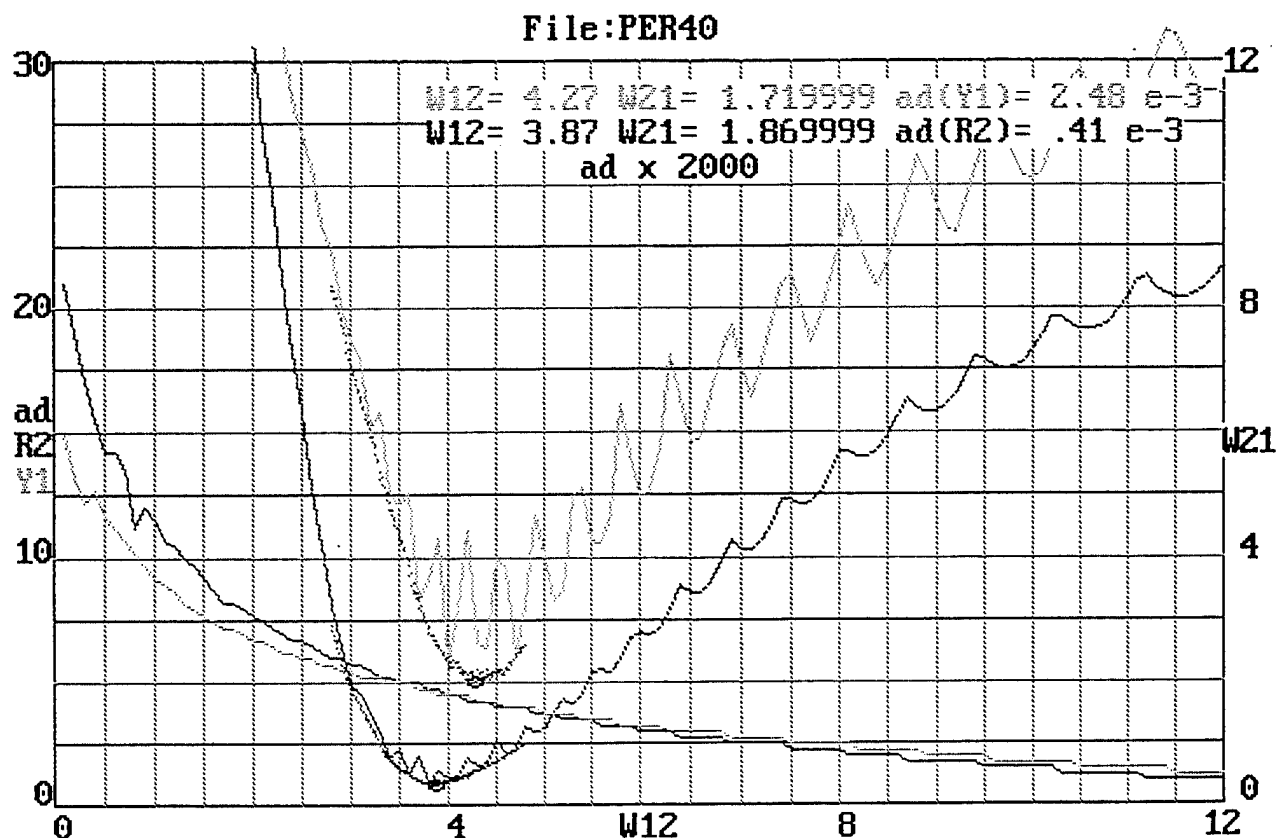
File:PER30



W12	W21	100ad(R2)	W12	W21	100ad(Y1)
4.46	1.89	2.604464E-02	4.91	1.75	.1569212
4.47	1.89	.02555556	4.92	1.74	.1568479
4.48	1.89	2.547396E-02	4.93	1.74	.1520472
4.49	1.88	2.552739E-02	4.94	1.74	.1477659
4.50	1.88	2.515671E-02	4.95	1.74	.1533193
4.51	1.88	2.518916E-02	4.96	1.73	.1561889
4.52	1.87	2.522459E-02	4.97	1.73	.1467305
4.53	1.87	2.496073E-02	4.98	1.73	.1433075
4.54	1.87	.0250947	4.99	1.73	.1544987
4.55	1.86	2.512657E-02	5.00	1.72	.1561974
4.56	1.86	2.495877E-02	5.01	1.72	.1415883
4.57	1.86	2.518234E-02	5.02	1.72	.1441598
4.58	1.85	2.522588E-02	5.03	1.72	.1601551
4.59	1.85	2.514193E-02	5.04	1.71	.1568658
4.60	1.85	2.544588E-02	5.05	1.71	.1439725
4.61	1.84	2.551487E-02	5.06	1.71	.1498963
4.62	1.84	2.550466E-02	5.07	1.71	.1657895
4.63	1.84	2.587775E-02	5.08	1.70	.162994
4.64	1.83	2.598724E-02	5.09	1.70	.1550325
4.65	1.83	2.604025E-02	5.10	1.70	.1550717
4.66	1.83	2.647143E-02	5.11	1.70	.1708567

PER30

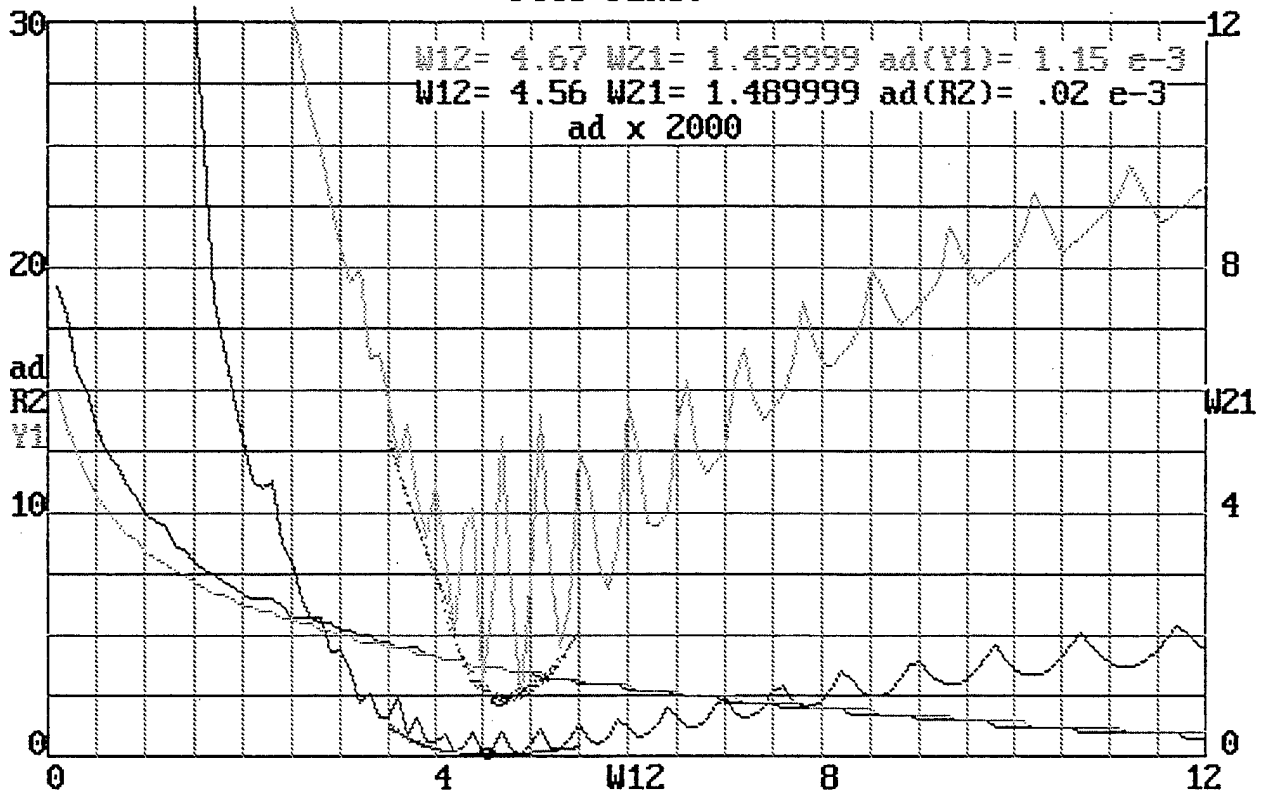
APPENDIX B



W12	W21	100ad(R2)	W12	W21	100ad(Y1)
3.77	1.92	4.455188E-02	4.17	1.75	.2572904
3.78	1.92	4.362932E-02	4.18	1.75	.2710481
3.79	1.91	4.357068E-02	4.19	1.74	.2638479
3.80	1.90	4.457699E-02	4.20	1.74	.2513866
3.81	1.90	4.281429E-02	4.21	1.74	.2638231
3.82	1.89	4.421753E-02	4.22	1.73	.27122
3.83	1.89	4.228823E-02	4.23	1.73	.2528161
3.84	1.88	4.410448E-02	4.24	1.73	.2560496
3.85	1.88	4.200178E-02	4.25	1.73	.2693822
3.86	1.87	4.424574E-02	4.26	1.72	.2645671
3.87	1.87	4.196282E-02	4.27	1.72	.2481868
3.88	1.86	.0446503	4.28	1.72	.261428
3.89	1.86	4.218103E-02	4.29	1.72	.2746453
3.90	1.85	4.532652E-02	4.30	1.71	.2559682
3.91	1.85	4.266314E-02	4.31	1.71	.2531667
3.92	1.84	.0462836	4.32	1.71	.2662977
3.93	1.84	4.342044E-02	4.33	1.70	.2688955
3.94	1.83	4.753136E-02	4.34	1.70	.2536257
3.95	1.83	.0444624	4.35	1.70	.2576401
3.96	1.82	4.908038E-02	4.36	1.70	.2706587
3.97	1.82	4.579829E-02	4.37	1.69	.2620121

PER40

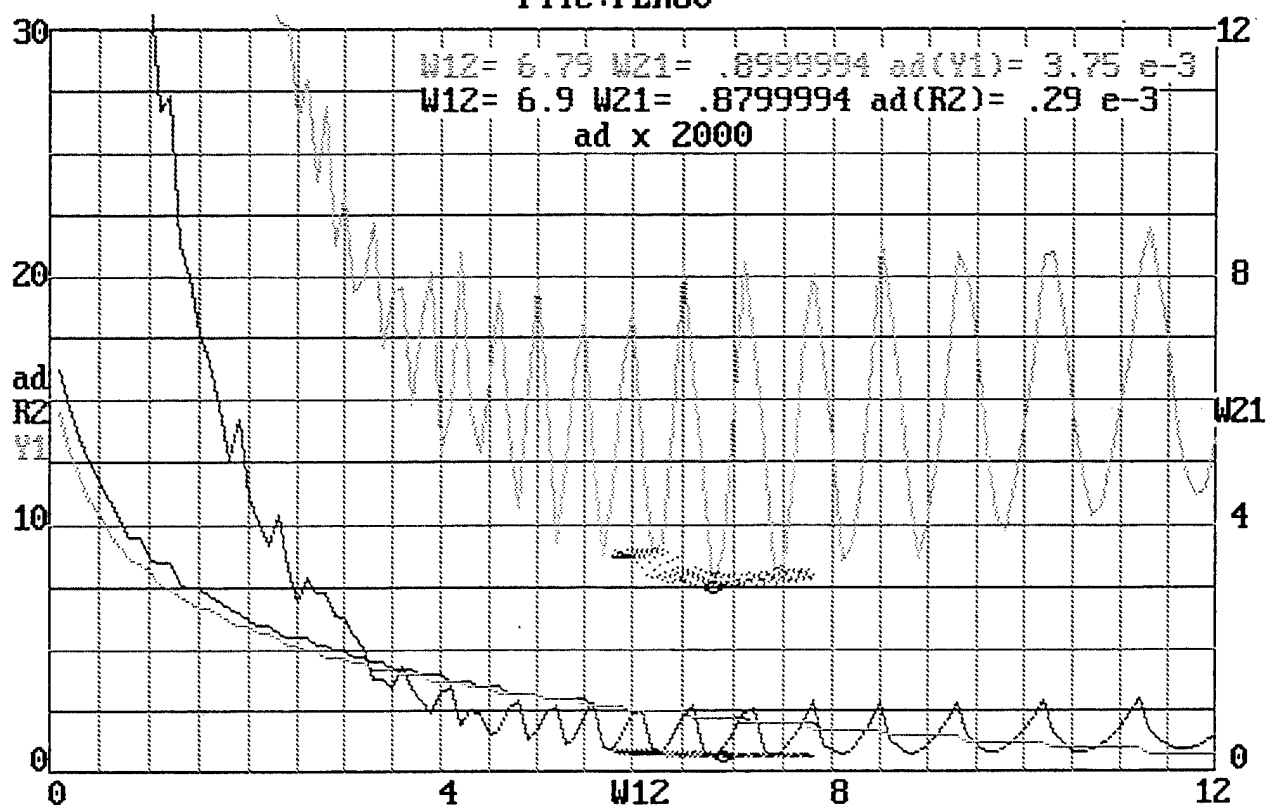
File:PER50



W12	W21	100ad(R2)	W12	W21	100ad(Y1)
4.46	1.52	3.705684E-03	4.57	1.49	.1240467
4.47	1.52	3.312627E-03	4.58	1.48	.1359676
4.48	1.51	4.358765E-03	4.59	1.48	.124686
4.49	1.51	3.569334E-03	4.60	1.48	.1188085
4.50	1.51	3.069374E-03	4.61	1.48	.126266
4.51	1.50	4.436712E-03	4.62	1.47	.1268963
4.52	1.50	3.537399E-03	4.63	1.47	.1202454
4.53	1.50	2.924185E-03	4.64	1.47	.1194239
4.54	1.50	4.527587E-03	4.65	1.46	.1294067
4.55	1.49	3.618421E-03	4.66	1.46	.1228352
4.56	1.49	2.886118E-03	4.67	1.46	.1153926
4.57	1.49	4.420926E-03	4.68	1.46	.1231675
4.58	1.48	3.821433E-03	4.69	1.45	.1211663
4.59	1.48	2.96428E-03	4.70	1.45	.1176561
4.60	1.48	4.408894E-03	4.71	1.45	.1170953
4.61	1.47	4.155887E-03	4.72	1.44	.1243413
4.62	1.47	3.167918E-03	4.73	1.44	.1199976
4.63	1.47	4.500719E-03	4.74	1.44	.1167367
4.64	1.47	4.625538E-03	4.75	1.44	.1205832
4.65	1.46	3.507543E-03	4.76	1.43	.124077
4.66	1.47	4.44578E-03	4.77	1.43	.1195942

PER50

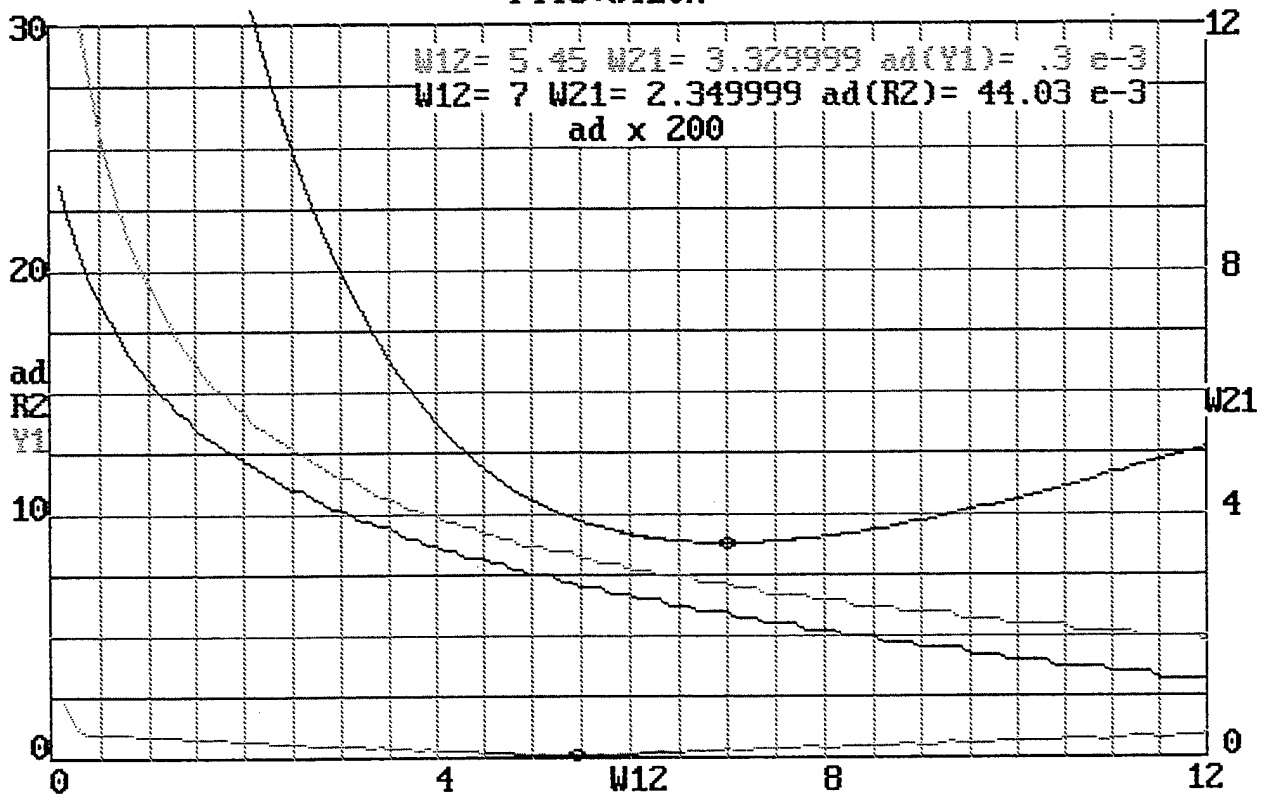
File:PER60



W12	W21	100ad(R2)	W12	W21	100ad(Y1)
6.80	0.90	3.161813E-02	6.69	0.92	.3836465
6.81	0.90	3.305085E-02	6.70	0.92	.3904659
6.82	0.90	.0345854	6.71	0.92	.3972829
6.83	0.90	3.622135E-02	6.72	0.92	.4040909
6.84	0.90	3.795695E-02	6.73	0.91	.3753108
6.85	0.89	3.062812E-02	6.74	0.91	.3782994
6.86	0.89	3.194284E-02	6.75	0.91	.3850633
6.87	0.89	3.335791E-02	6.76	0.91	.3918225
6.88	0.89	3.487345E-02	6.77	0.91	.398581
6.89	0.89	3.648863E-02	6.78	0.91	.4053283
6.90	0.88	2.970005E-02	6.79	0.90	.3752452
6.91	0.88	3.089346E-02	6.80	0.90	.3793472
6.92	0.88	3.218646E-02	6.81	0.90	.3860527
6.93	0.88	3.357832E-02	6.82	0.90	.3927529
6.94	0.88	3.506891E-02	6.83	0.90	.3994471
6.95	0.88	3.665734E-02	6.84	0.90	.4061383
6.96	0.87	2.991918E-02	6.85	0.89	.3755248
6.97	0.87	3.108696E-02	6.86	0.89	.3799737
6.98	0.87	3.235242E-02	6.87	0.89	.3866214
6.99	0.87	.0337157	6.88	0.89	.3932608
7.00	0.87	3.517569E-02	6.89	0.89	.3998983

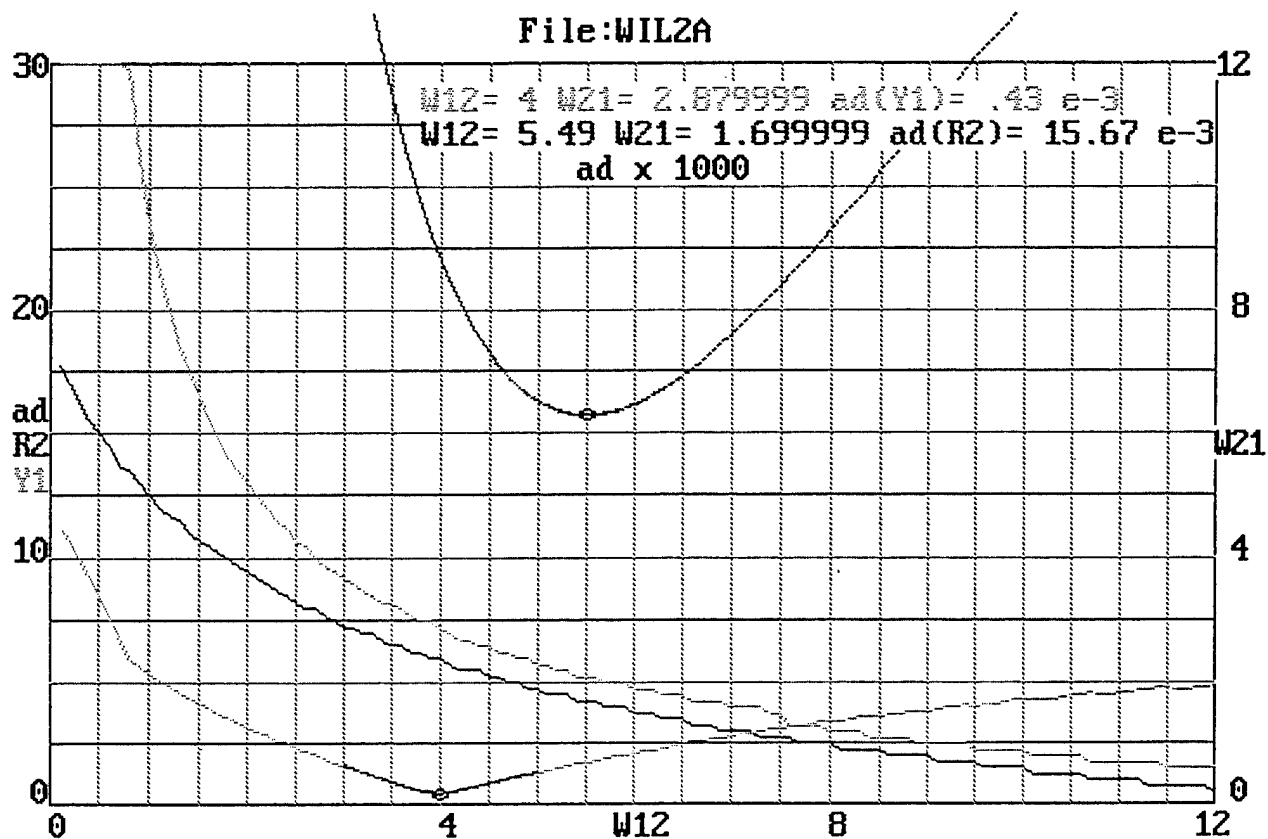
PER60

File:WIL0A



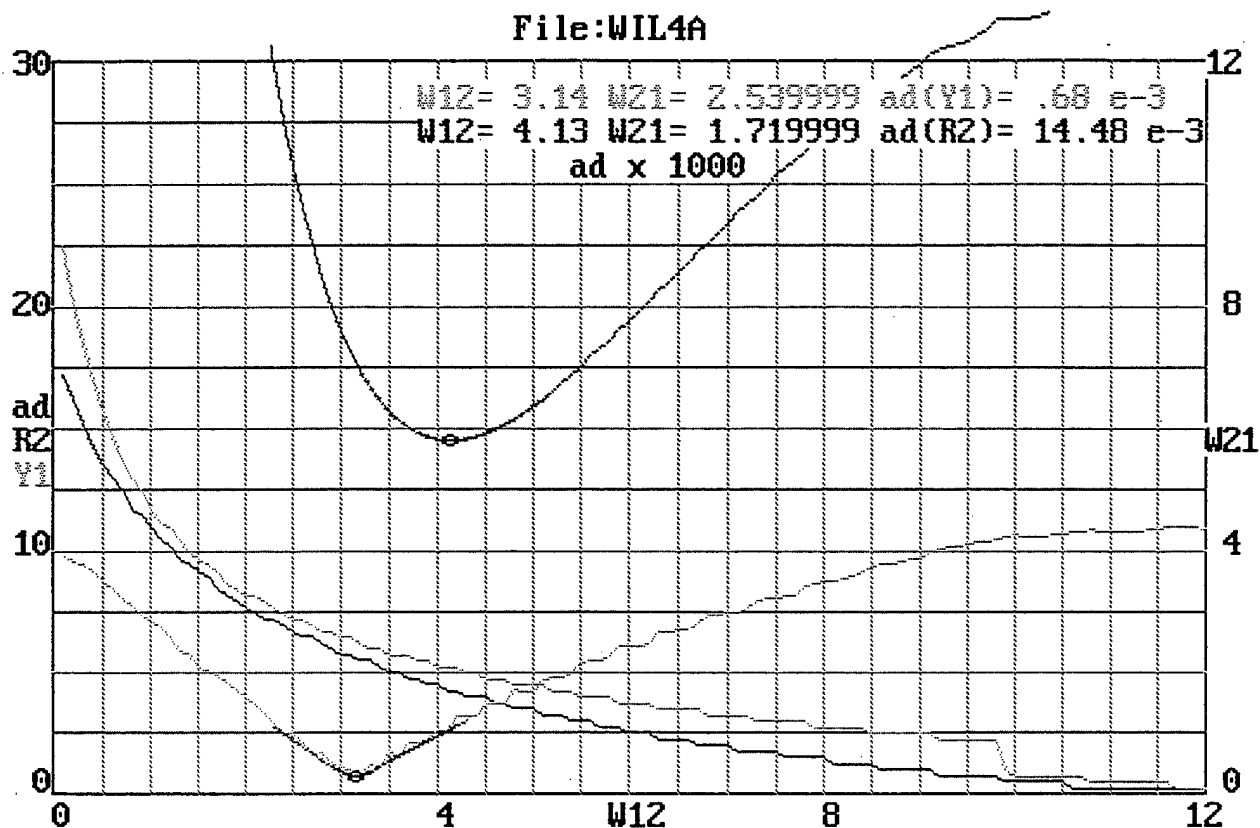
W12	W21	100ad(R2)	W12	W21	100ad(Y1)
6.90	2.38	4.404909	5.35	3.37	.0344716
6.91	2.38	4.404649	5.36	3.36	3.477857E-02
6.92	2.37	4.404428	5.37	3.36	.031434
6.93	2.37	4.40416	5.38	3.36	3.420487E-02
6.94	2.37	4.403978	5.39	3.35	3.254637E-02
6.95	2.37	4.403879	5.40	3.35	3.149808E-02
6.96	2.36	4.403708	5.41	3.35	3.478676E-02
6.97	2.36	4.4036	5.42	3.34	.0316307
6.98	2.36	4.403578	5.43	3.34	3.252328E-02
6.99	2.35	4.403557	5.44	3.33	.0342615
7.00	2.35	4.403523	5.45	3.33	3.094748E-02
7.01	2.35	4.403569	5.46	3.33	.0334777
7.02	2.35	4.403696	5.47	3.32	3.363043E-02
7.03	2.34	4.403733	5.48	3.32	3.112331E-02
7.04	2.34	4.403846	5.49	3.32	.0343658
7.05	2.34	4.40405	5.50	3.31	3.307089E-02
7.06	2.33	4.404234	5.51	3.31	3.219321E-02
7.07	2.33	4.404423	5.52	3.30	3.620982E-02
7.08	2.33	4.404685	5.53	3.30	3.393218E-02
7.09	2.32	4.405019	5.54	3.30	.0350751
7.10	2.32	4.405269	5.55	3.29	3.787205E-02

WIL0A



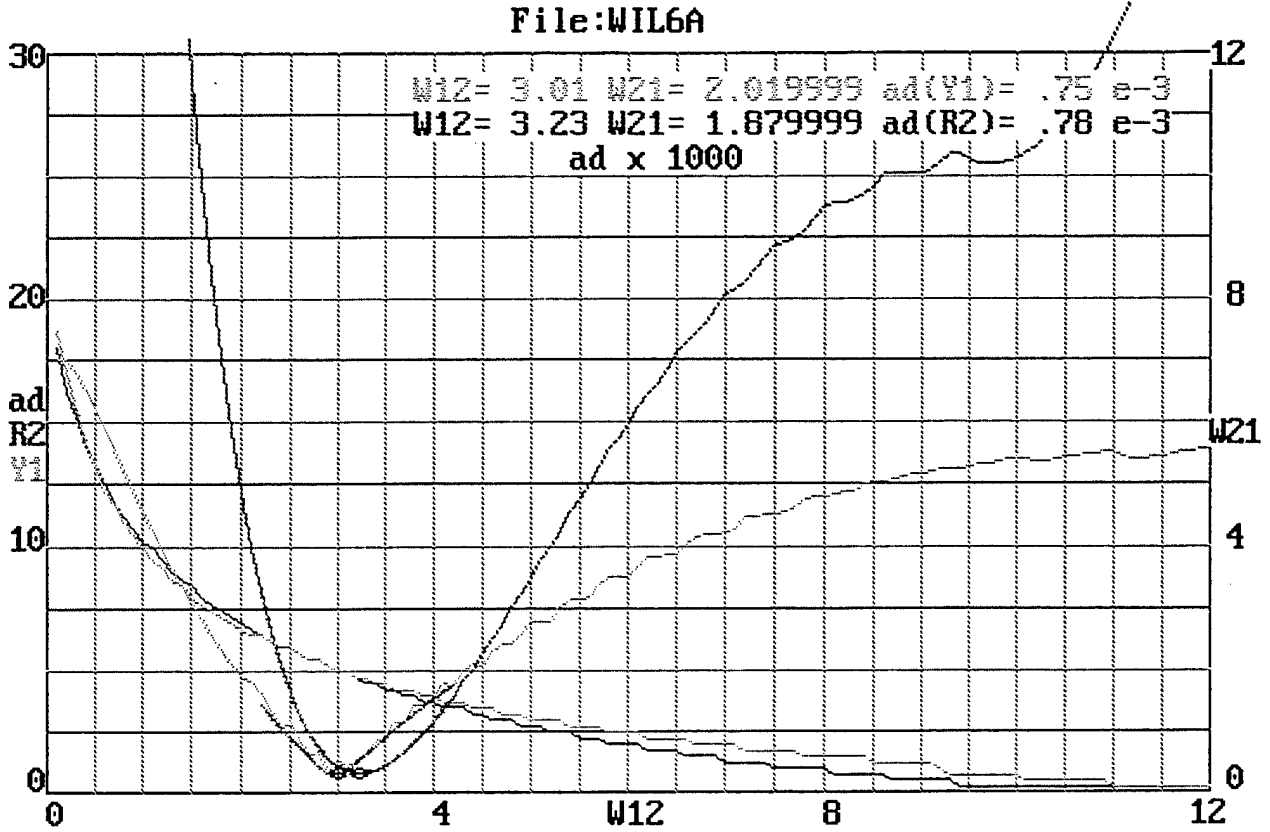
W12	W21	100ad(R2)	W12	W21	100ad(Y1)
5.39	1.74	1.569521	3.90	2.95	4.646291E-02
5.40	1.73	1.569069	3.91	2.94	4.562627E-02
5.41	1.73	1.568676	3.92	2.93	4.507954E-02
5.42	1.72	1.568403	3.93	2.93	4.569942E-02
5.43	1.72	1.568034	3.94	2.92	.044846
5.44	1.72	1.567793	3.95	2.91	.0445095
5.45	1.71	1.5676	3.96	2.91	4.489693E-02
5.46	1.71	1.567386	3.97	2.90	4.402833E-02
5.47	1.71	1.567289	3.98	2.89	4.403591E-02
5.48	1.70	1.567182	3.99	2.89	.0440538
5.49	1.70	1.567109	4.00	2.88	4.317002E-02
5.50	1.70	1.567157	4.01	2.87	4.385873E-02
5.51	1.69	1.56713	4.02	2.87	4.420985E-02
5.52	1.69	1.567201	4.03	2.86	4.395897E-02
5.53	1.68	1.567353	4.04	2.86	4.568533E-02
5.54	1.68	1.567442	4.05	2.85	.0454182
5.55	1.68	1.567651	4.06	2.84	4.581701E-02
5.56	1.67	1.567883	4.07	2.84	4.686443E-02
5.57	1.67	1.568107	4.08	2.83	4.657778E-02
5.58	1.67	1.568448	4.09	2.82	4.779534E-02
5.59	1.66	1.568765	4.10	2.82	4.821637E-02

WIL2A



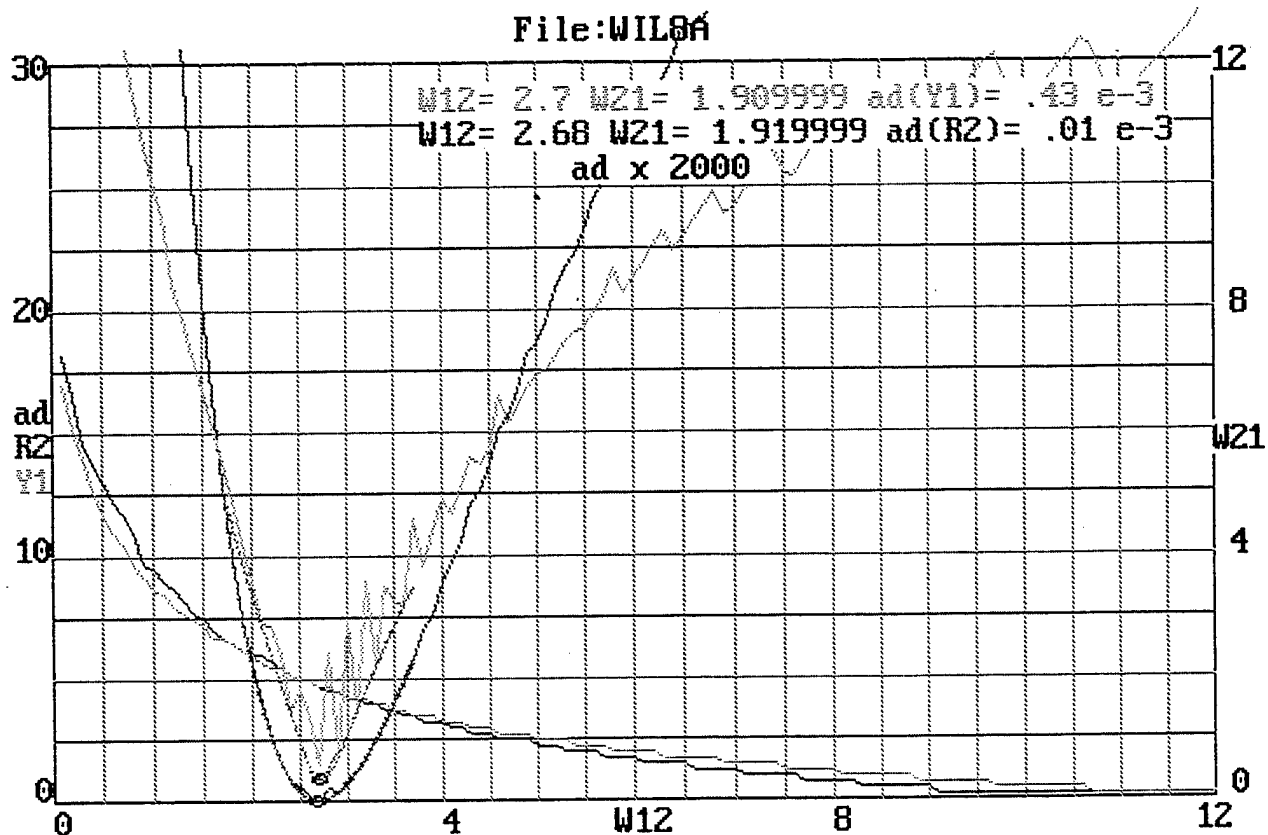
W12	W21	100ad(R2)	W12	W21	100ad(Y1)
4.03	1.77	1.451145	3.04	2.59	8.348585E-02
4.04	1.76	1.450628	3.05	2.59	8.010924E-02
4.05	1.76	1.450219	3.06	2.58	7.839799E-02
4.06	1.75	1.449824	3.07	2.58	7.695854E-02
4.07	1.75	1.449501	3.08	2.57	7.341802E-02
4.08	1.74	1.449231	3.09	2.57	7.471025E-02
4.09	1.74	1.448989	3.10	2.56	7.021487E-02
4.10	1.73	1.448844	3.11	2.56	.0736779
4.11	1.73	1.448676	3.12	2.55	6.914496E-02
4.12	1.72	1.448655	3.13	2.54	7.158935E-02
4.13	1.72	1.448565	3.14	2.54	6.856263E-02
4.14	1.71	1.448668	3.15	2.53	7.038057E-02
4.15	1.71	1.448646	3.16	2.53	6.921411E-02
4.16	1.71	1.448836	3.17	2.52	6.990731E-02
4.17	1.70	1.448922	3.18	2.52	7.021845E-02
4.18	1.70	1.449178	3.19	2.51	.0699848
4.19	1.69	1.449393	3.20	2.51	7.357538E-02
4.20	1.69	1.449706	3.21	2.50	7.249773E-02
4.21	1.68	1.450046	3.22	2.50	.0768292
4.22	1.68	1.450422	3.23	2.49	7.505358E-02
4.23	1.67	1.450888	3.24	2.48	7.998109E-02

WIL4A



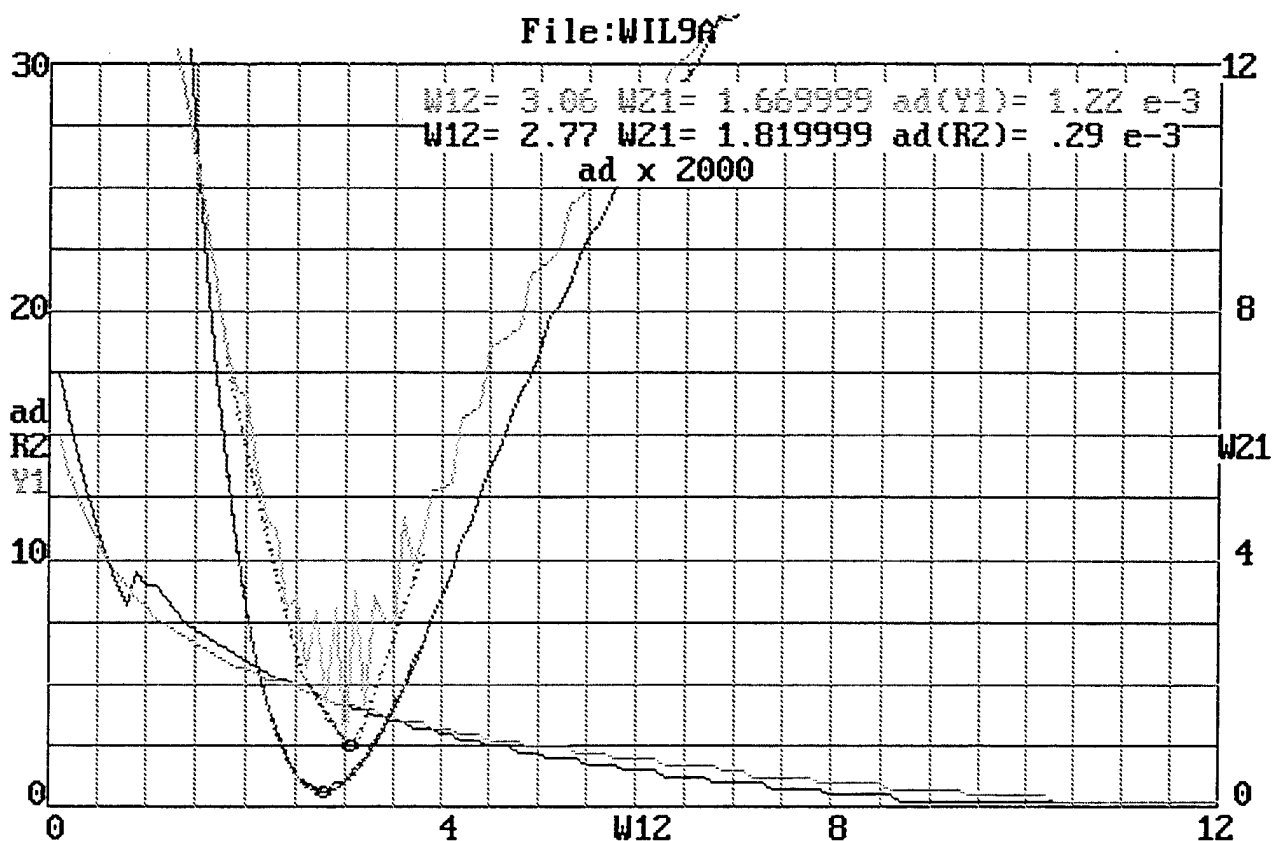
W12	W21	100ad(R2)	W12	W21	100ad(Y1)
3.13	1.94	8.332415E-02	2.91	2.10	8.126438E-02
3.14	1.93	8.239601E-02	2.92	2.09	.0808686
3.15	1.93	.0816753	2.93	2.09	7.961333E-02
3.16	1.92	8.086966E-02	2.94	2.08	7.921756E-02
3.17	1.91	8.032244E-02	2.95	2.07	7.882835E-02
3.18	1.91	7.978261E-02	2.96	2.06	7.843435E-02
3.19	1.90	7.935431E-02	2.97	2.06	7.791877E-02
3.20	1.90	7.912263E-02	2.98	2.05	7.712722E-02
3.21	1.89	7.881111E-02	2.99	2.04	7.640302E-02
3.22	1.88	7.876538E-02	3.00	2.03	.0760156
3.23	1.88	7.867849E-02	3.01	2.02	7.563055E-02
3.24	1.87	7.874623E-02	3.02	2.02	7.683456E-02
3.25	1.87	7.894525E-02	3.03	2.01	7.606685E-02
3.26	1.86	7.912453E-02	3.04	2.00	7.847548E-02
3.27	1.85	7.957828E-02	3.05	2.00	7.929385E-02
3.28	1.85	7.988755E-02	3.06	1.99	8.062125E-02
3.29	1.84	.0804511	3.07	1.99	8.451044E-02
3.30	1.84	8.102365E-02	3.08	1.98	.0850898
3.31	1.83	8.169579E-02	3.09	1.98	9.079992E-02
3.32	1.83	8.252175E-02	3.10	1.97	9.136558E-02
3.33	1.82	8.330006E-02	3.11	1.97	.0977242

WIL6A



W12	W21	100ad(R2)	W12	W21	100ad(Y1)
2.58	1.99	6.149209E-03	2.60	1.97	6.879717E-02
2.59	1.98	5.195772E-03	2.61	1.96	6.125123E-02
2.60	1.97	4.492069E-03	2.62	1.96	5.865246E-02
2.61	1.97	3.69384E-03	2.63	1.95	5.112887E-02
2.62	1.96	3.020177E-03	2.64	1.94	4.459322E-02
2.63	1.95	2.603116E-03	2.65	1.94	5.051643E-02
2.64	1.95	2.060334E-03	2.66	1.93	.0436768
2.65	1.94	1.669392E-03	2.67	1.93	5.053133E-02
2.66	1.93	1.542912E-03	2.68	1.92	4.361719E-02
2.67	1.93	1.220308E-03	2.69	1.92	5.042851E-02
2.68	1.92	1.116663E-03	2.70	1.91	4.343242E-02
2.69	1.92	1.234611E-03	2.71	1.90	4.873425E-02
2.70	1.91	.0011493	2.72	1.90	4.405678E-02
2.71	1.90	1.338879E-03	2.73	1.89	4.728586E-02
2.72	1.90	1.620407E-03	2.74	1.89	4.941374E-02
2.73	1.89	1.826756E-03	2.75	1.88	.0488922
2.74	1.88	2.317409E-03	2.76	1.88	5.462021E-02
2.75	1.88	2.730106E-03	2.77	1.87	5.093217E-02
2.76	1.87	3.236633E-03	2.78	1.87	5.969554E-02
2.77	1.87	4.02997E-03	2.79	1.86	5.452633E-02
2.78	1.86	4.549321E-03	2.80	1.86	.0703931

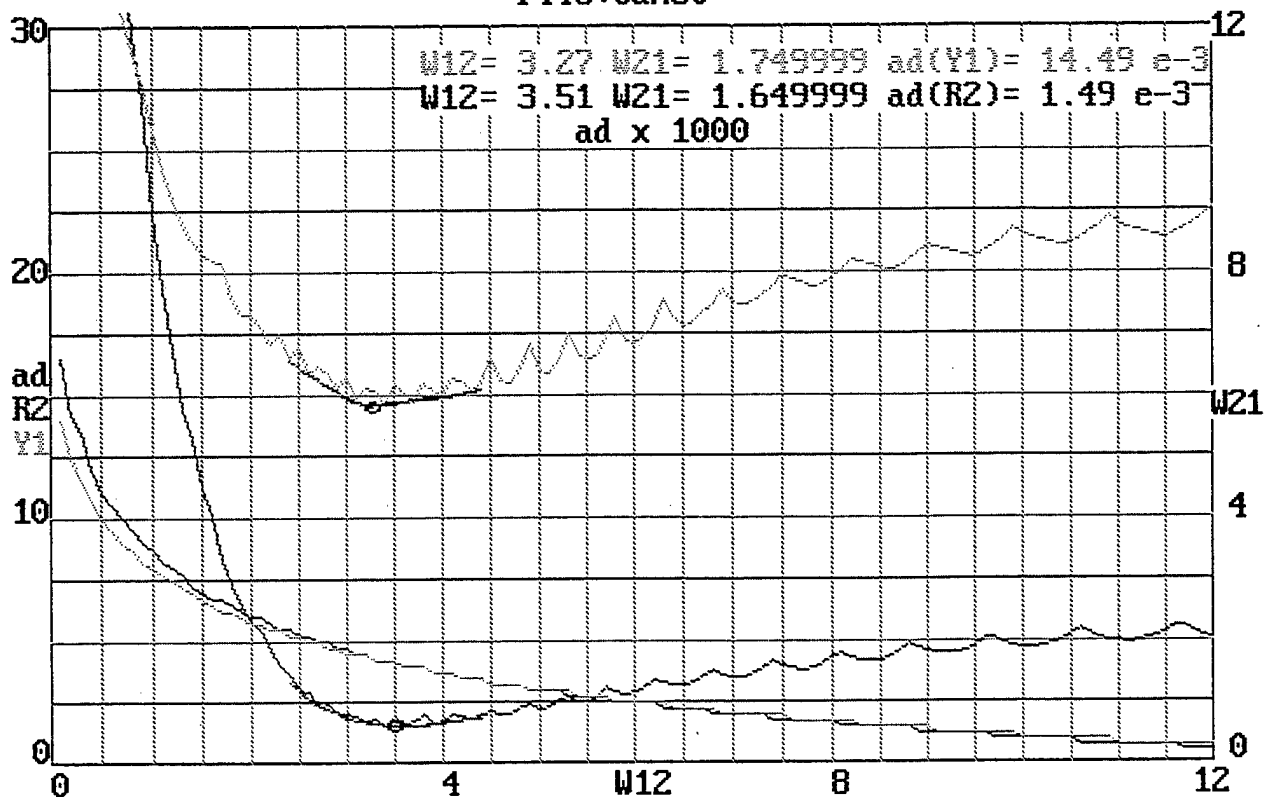
WIL8A



W12	W21	100ad(R2)	W12	W21	100ad(Y1)
2.67	1.88	3.404554E-02	2.96	1.71	.1485214
2.68	1.88	3.310769E-02	2.97	1.71	.1396909
2.69	1.87	3.223756E-02	2.98	1.71	.1454696
2.70	1.86	3.164412E-02	2.99	1.70	.1314834
2.71	1.86	3.090387E-02	3.00	1.70	.1372084
2.72	1.85	3.038398E-02	3.01	1.69	.1232892
2.73	1.85	3.002423E-02	3.02	1.69	.1288623
2.74	1.84	2.957472E-02	3.03	1.68	.1271799
2.75	1.83	2.940861E-02	3.04	1.68	.123933
2.76	1.83	2.919848E-02	3.05	1.67	.1355261
2.77	1.82	2.910029E-02	3.06	1.67	.1229763
2.78	1.82	2.923872E-02	3.07	1.67	.1356259
2.79	1.81	2.920487E-02	3.08	1.66	.1245558
2.80	1.80	2.946527E-02	3.09	1.66	.1344249
2.81	1.80	2.970603E-02	3.10	1.65	.1375169
2.82	1.79	3.003019E-02	3.11	1.65	.1330555
2.83	1.79	3.058859E-02	3.12	1.64	.1508951
2.84	1.78	3.097321E-02	3.13	1.64	.1315117
2.85	1.77	3.166327E-02	3.14	1.64	.1610607
2.86	1.77	3.227911E-02	3.15	1.63	.1418516
2.87	1.76	3.303025E-02	3.16	1.63	.1604885

WIL9A

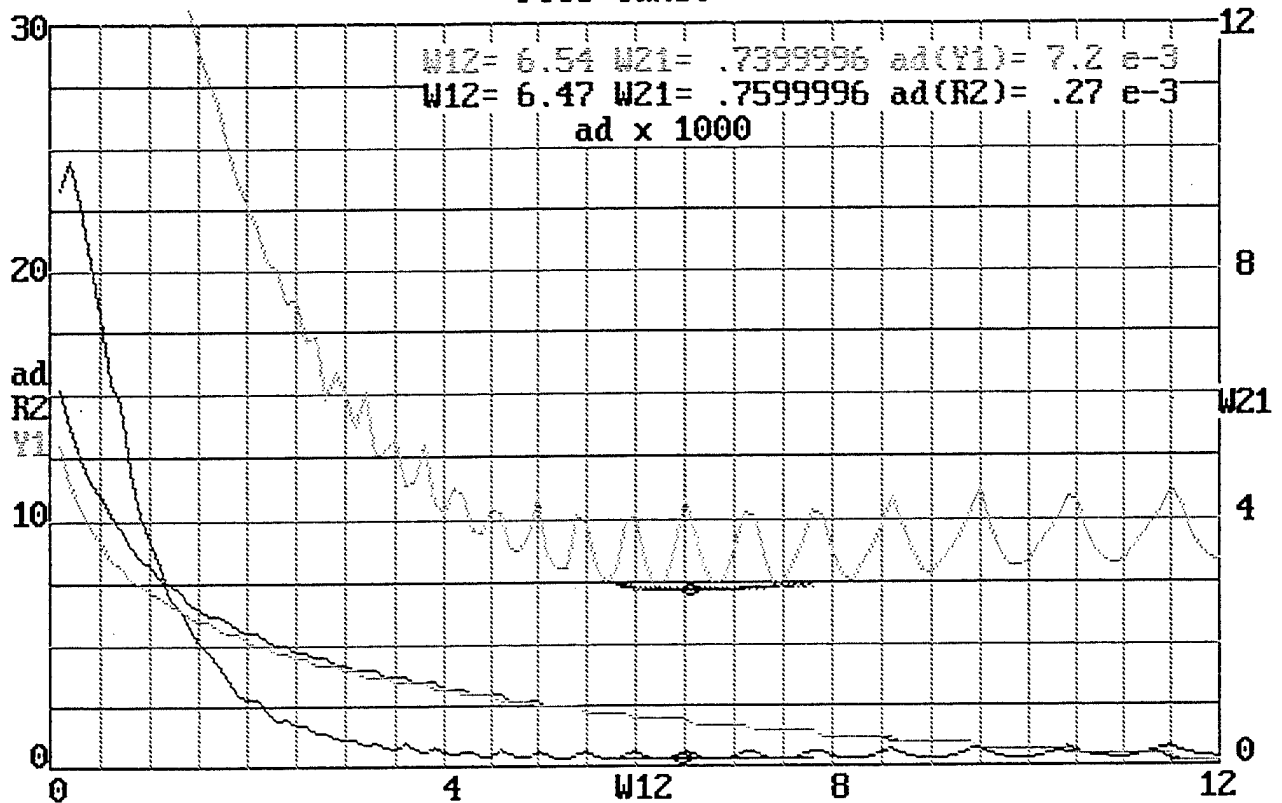
File:C&H60



W12	W21	100ad(R2)	W12	W21	100ad(Y1)
3.41	1.70	.1525525	3.17	1.79	1.45944
3.42	1.69	.1521791	3.18	1.79	1.464145
3.43	1.69	.1514778	3.19	1.78	1.456437
3.44	1.68	.1515922	3.20	1.78	1.457628
3.45	1.68	.150639	3.21	1.77	1.458935
3.46	1.67	.1512585	3.22	1.77	1.454071
3.47	1.67	.1500496	3.23	1.77	1.455745
3.48	1.66	.1511906	3.24	1.76	1.453873
3.49	1.66	.1497209	3.25	1.76	1.452149
3.50	1.65	.1514003	3.26	1.75	1.456656
3.51	1.65	.1496649	3.27	1.75	1.44902
3.52	1.64	.1519019	3.28	1.74	1.459561
3.53	1.64	.1498974	3.29	1.74	1.461093
3.54	1.63	.1527077	3.30	1.74	1.458619
3.55	1.63	.1504284	3.31	1.74	1.463192
3.56	1.64	.1523332	3.32	1.73	1.460454
3.57	1.62	.1512735	3.33	1.73	1.460358
3.58	1.63	.1520917	3.34	1.72	1.464488
3.59	1.63	.152071	3.35	1.72	1.459943
3.60	1.62	.1521396	3.36	1.72	1.461958
3.61	1.62	.151828	3.37	1.71	1.464067

C&H60

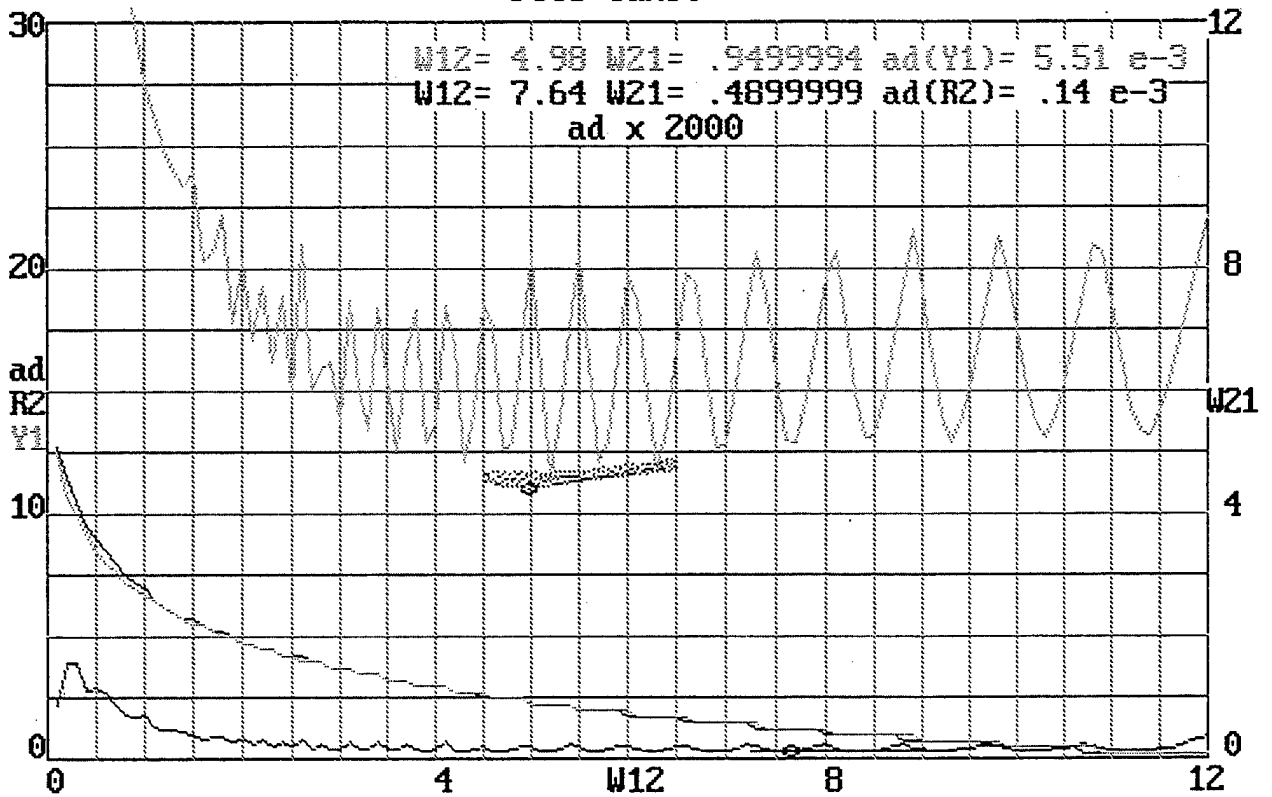
File:C&H80



W12	W21	100ad(R2)	W12	W21	100ad(Y1)
6.37	0.78	2.731528E-02	6.44	0.76	.7219717
6.38	0.78	2.750499E-02	6.45	0.76	.7230591
6.39	0.77	.027436	6.46	0.76	.7241443
6.40	0.77	2.727097E-02	6.47	0.76	.7252315
6.41	0.77	2.720303E-02	6.48	0.75	.7236995
6.42	0.77	2.723086E-02	6.49	0.75	.721473
6.43	0.77	2.735474E-02	6.50	0.75	.7225506
6.44	0.77	.0275733	6.51	0.75	.7236285
6.45	0.76	2.737476E-02	6.52	0.75	.7247063
6.46	0.76	2.723945E-02	6.53	0.75	.7257818
6.47	0.76	2.719889E-02	6.54	0.74	.72092
6.48	0.76	2.725303E-02	6.55	0.74	.7219896
6.49	0.76	2.740084E-02	6.56	0.74	.7230558
6.50	0.75	2.754805E-02	6.57	0.74	.724125
6.51	0.75	.0273418	6.58	0.74	.7251933
6.52	0.75	.0272293	6.59	0.73	.7238131
6.53	0.75	.0272102	6.60	0.73	.7213735
6.54	0.75	2.728383E-02	6.61	0.73	.7224343
6.55	0.75	2.744933E-02	6.62	0.73	.7234921
6.56	0.74	2.752044E-02	6.63	0.73	.7245493
6.57	0.74	2.733223E-02	6.64	0.73	.7256068

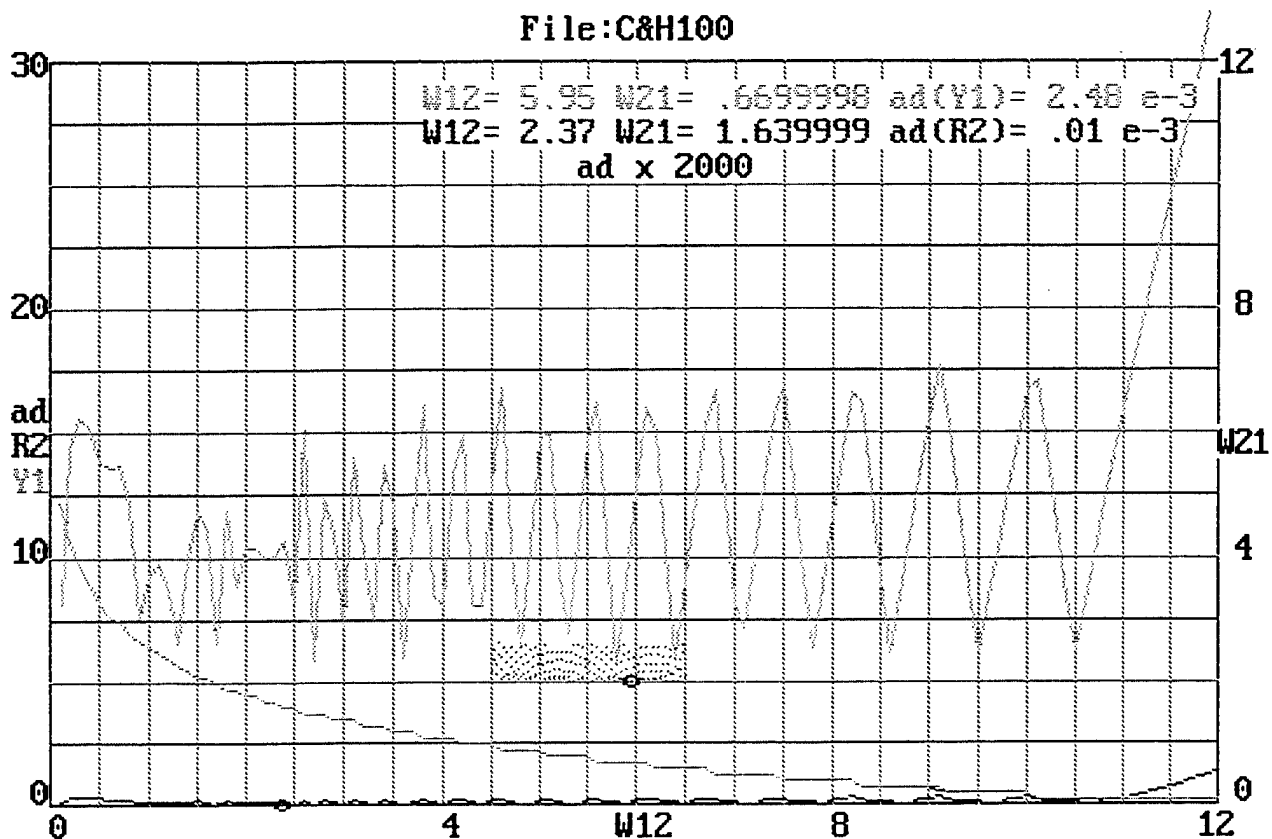
C&H80

File:C&H90



W12	W21	100ad(R2)	W12	W21	100ad(Y1)
7.54	0.50	1.449649E-02	4.88	0.97	.5630451
7.55	0.50	1.443705E-02	4.89	0.97	.5523019
7.56	0.50	1.440309E-02	4.90	0.97	.5679632
7.57	0.50	1.439493E-02	4.91	0.96	.5857888
7.58	0.50	1.441189E-02	4.92	0.96	.571333
7.59	0.50	1.445431E-02	4.93	0.96	.5569123
7.60	0.50	1.452161E-02	4.94	0.96	.5577666
7.61	0.49	1.452282E-02	4.95	0.96	.575542
7.62	0.49	1.445496E-02	4.96	0.95	.5801457
7.63	0.49	1.441225E-02	4.97	0.95	.5658355
7.64	0.49	1.439457E-02	4.98	0.95	.5515556
7.65	0.49	1.440219E-02	4.99	0.95	.5637127
7.66	0.49	1.443432E-02	5.00	0.95	.5820456
7.67	0.49	1.449114E-02	5.01	0.94	.5752715
7.68	0.48	1.455887E-02	5.02	0.94	.561102
7.69	0.48	1.448099E-02	5.03	0.94	.5558285
7.70	0.48	1.442787E-02	5.04	0.94	.5689468
7.71	0.48	1.439956E-02	5.05	0.93	.5852176
7.72	0.48	1.439571E-02	5.06	0.93	.571152
7.73	0.48	1.441631E-02	5.07	0.93	.5571189
7.74	0.48	1.446115E-02	5.08	0.93	.5604838

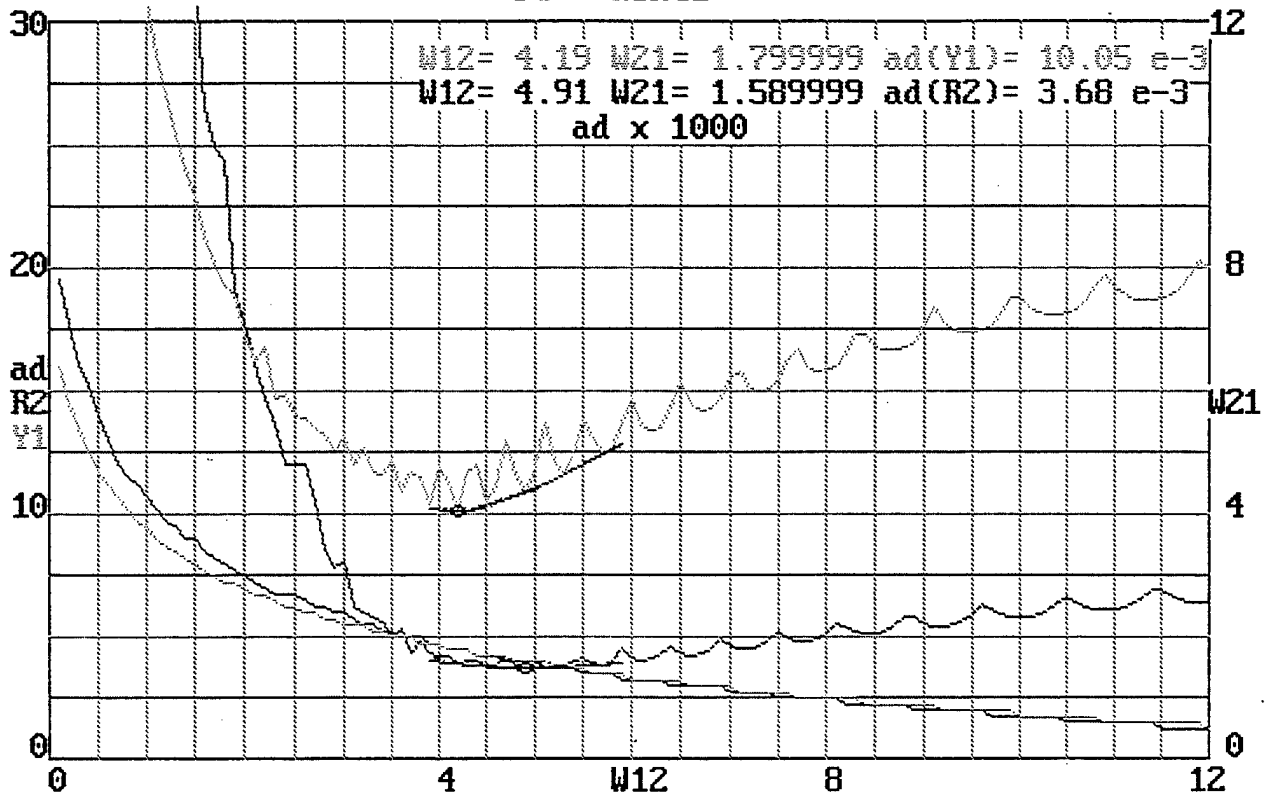
C&H90



W12	W21	100ad(R2)	W12	W21	100ad(Y1)
2.27	1.69	2.054999E-03	5.85	0.69	.2723239
2.28	1.69	2.196337E-03	5.86	0.69	.2895745
2.29	1.68	2.03693E-03	5.87	0.69	.3067844
2.30	1.68	2.168767E-03	5.88	0.69	.3239572
2.31	1.67	2.018722E-03	5.89	0.68	.2506745
2.32	1.67	2.140464E-03	5.90	0.68	.2603682
2.33	1.66	2.000876E-03	5.91	0.68	.277481
2.34	1.66	2.11183E-03	5.92	0.68	.294553
2.35	1.65	1.983851E-03	5.93	0.68	.3115897
2.36	1.65	2.08359E-03	5.94	0.67	.2637001
2.37	1.64	1.968277E-03	5.95	0.67	.2483982
2.38	1.64	2.056335E-03	5.96	0.67	.2646101
2.39	1.64	2.181825E-03	5.97	0.67	.2815495
2.40	1.63	2.030575E-03	5.98	0.67	.2984491
2.41	1.63	.0021434	5.99	0.67	.3153128
2.42	1.62	2.006829E-03	6.00	0.66	.2597317
2.43	1.62	2.106546E-03	6.01	0.66	.2509646
2.44	1.61	1.986141E-03	6.02	0.66	.2677726
2.45	1.61	2.072217E-03	6.03	0.66	.2845417
2.46	1.60	1.96885E-03	6.04	0.66	.3012754
2.47	1.60	2.040981E-03	6.05	0.66	.3179712

C&H100

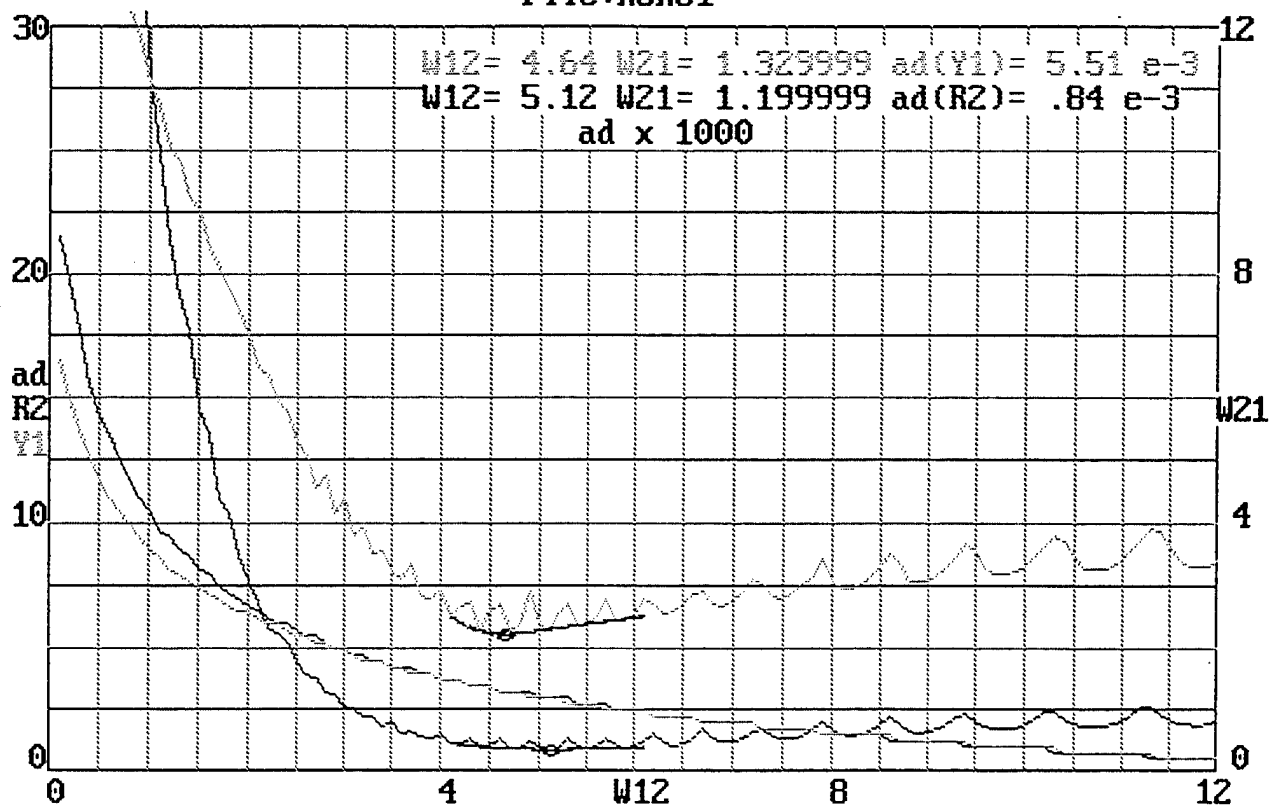
File:KUR41



W12	W21	100ad(R2)	W12	W21	100ad(Y1)
4.81	1.62	.3693658	4.09	1.83	1.008479
4.82	1.62	.3697006	4.10	1.83	1.012144
4.83	1.61	.3692486	4.11	1.82	1.01265
4.84	1.61	.3690994	4.12	1.82	1.007209
4.85	1.61	.3692642	4.13	1.82	1.009415
4.86	1.60	.3693257	4.14	1.81	1.015881
4.87	1.60	.3690033	4.15	1.81	1.009024
4.88	1.60	.3689913	4.16	1.81	1.006538
4.89	1.60	.3692897	4.17	1.81	1.013786
4.90	1.59	.3690924	4.18	1.80	1.012463
4.91	1.59	.3688994	4.19	1.80	1.005665
4.92	1.59	.3690125	4.20	1.80	1.009823
4.93	1.58	.3693782	4.21	1.79	1.01606
4.94	1.58	.3689974	4.22	1.79	1.009307
4.95	1.58	.3689198	4.23	1.79	1.006112
4.96	1.58	.3691447	4.24	1.79	1.014248
4.97	1.57	.3693017	4.25	1.78	1.013103
4.98	1.57	.3690277	4.26	1.78	1.006915
4.99	1.57	.3690547	4.27	1.78	1.009778
5.00	1.57	.3693767	4.28	1.77	1.017058
5.01	1.56	.3693512	4.29	1.77	1.010406

KUR41

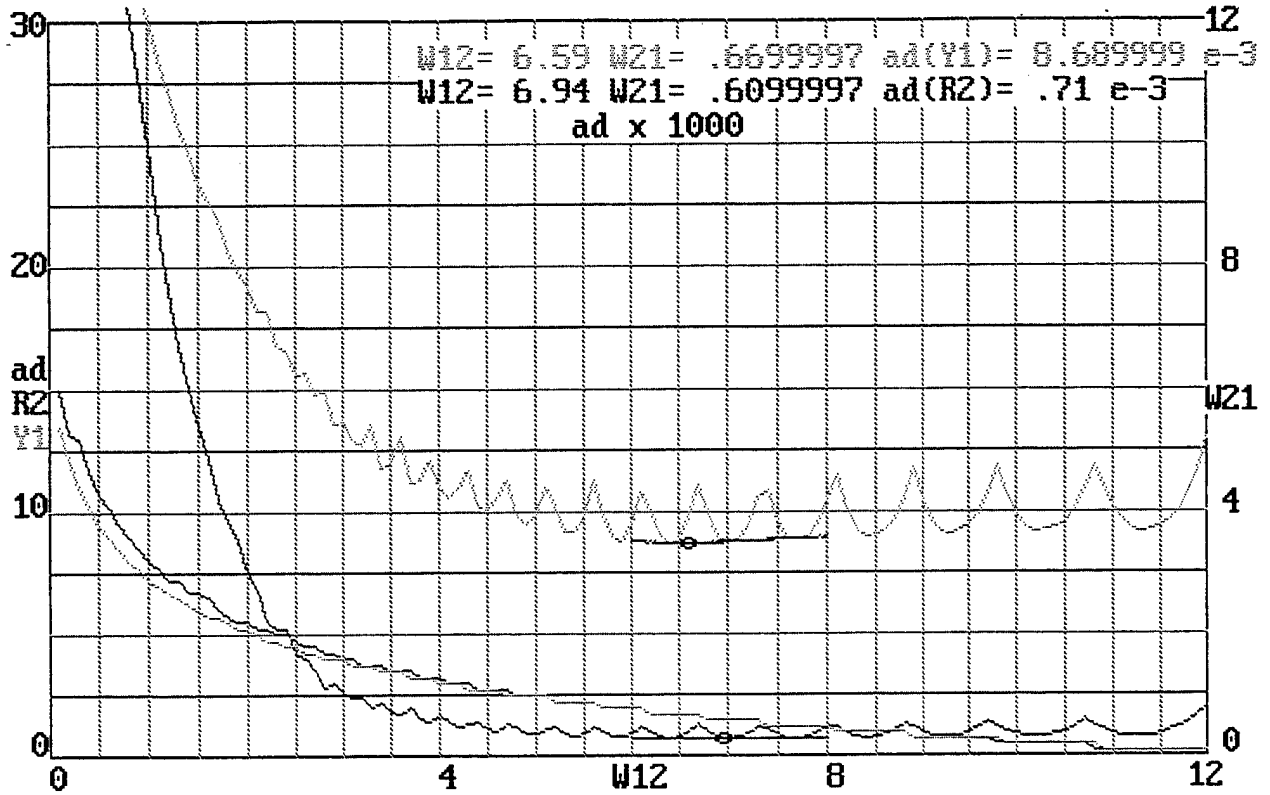
File:KUR61



W12	W21	100ad(R2)	W12	W21	100ad(Y1)
5.02	1.23	8.467681E-02	4.54	1.36	.5562575
5.03	1.22	8.451463E-02	4.55	1.36	.558132
5.04	1.22	.0842831	4.56	1.35	.5559853
5.05	1.22	8.435603E-02	4.57	1.35	.5543147
5.06	1.22	8.473121E-02	4.58	1.35	.5556235
5.07	1.21	8.433486E-02	4.59	1.34	.5574989
5.08	1.21	8.420559E-02	4.60	1.34	.5530558
5.09	1.21	8.437588E-02	4.61	1.34	.5536437
5.10	1.20	8.458031E-02	4.62	1.34	.556807
5.11	1.20	8.424258E-02	4.63	1.33	.5547166
5.12	1.20	8.420184E-02	4.64	1.33	.5516329
5.13	1.20	8.445621E-02	4.65	1.33	.5550798
5.14	1.19	8.448356E-02	4.66	1.32	.5564941
5.15	1.19	8.422582E-02	4.67	1.32	.5521123
5.16	1.19	8.426066E-02	4.68	1.32	.5532384
5.17	1.19	8.458622E-02	4.69	1.32	.5576168
5.18	1.18	8.446556E-02	4.70	1.31	.5540345
5.19	1.18	8.427486E-02	4.71	1.31	.5521663
5.20	1.18	8.437281E-02	4.72	1.31	.5556298
5.21	1.18	8.475695E-02	4.73	1.30	.5560722
5.22	1.17	8.451723E-02	4.74	1.30	.5542585

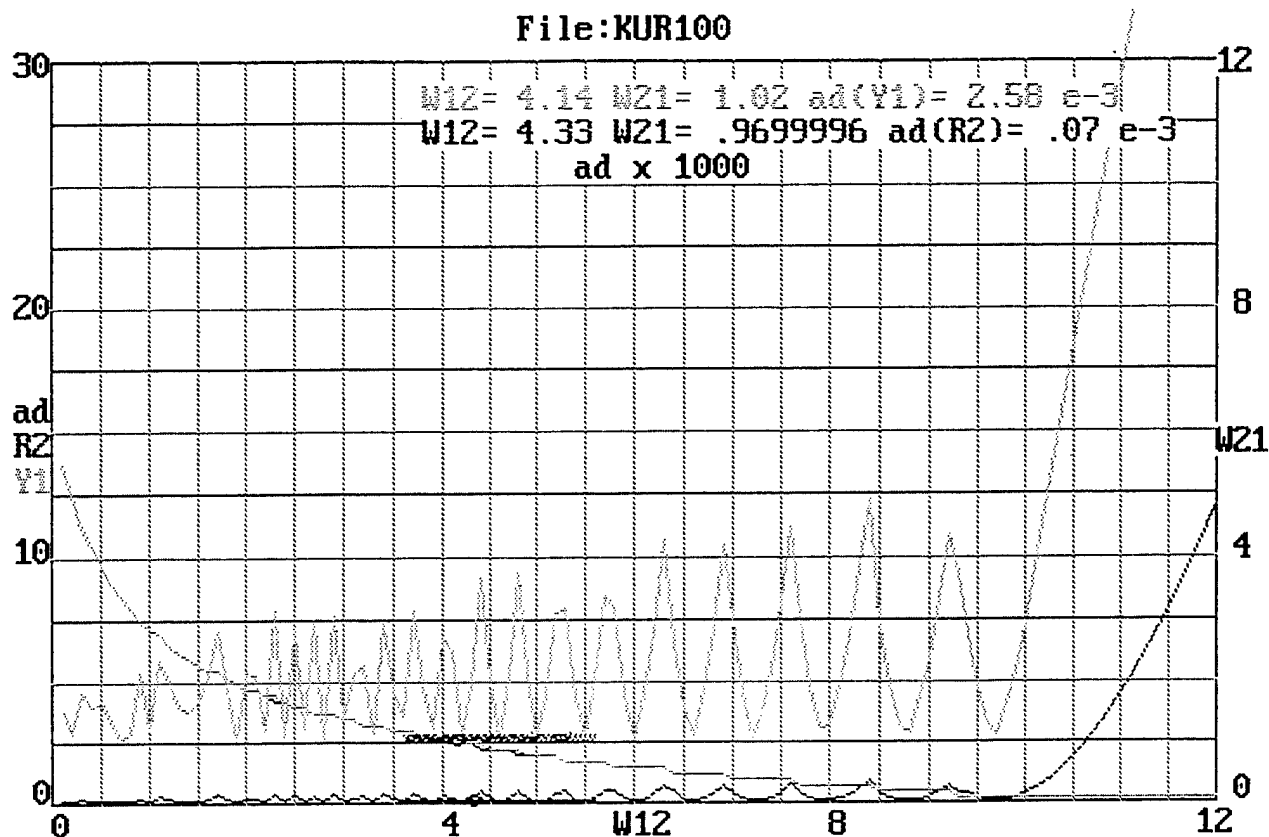
KUR61

File:KUR81



W12	W21	100ad(R2)	W12	W21	100ad(Y1)
6.84	0.63	7.199599E-02	6.49	0.69	.8723291
6.85	0.62	7.222191E-02	6.50	0.69	.8734815
6.86	0.62	7.192283E-02	6.51	0.68	.8728057
6.87	0.62	7.174505E-02	6.52	0.68	.8713112
6.88	0.62	.071687	6.53	0.68	.8702916
6.89	0.62	7.174845E-02	6.54	0.68	.8709669
6.90	0.62	7.192898E-02	6.55	0.68	.871936
6.91	0.62	7.222696E-02	6.56	0.68	.8737571
6.92	0.61	7.195253E-02	6.57	0.67	.8727366
6.93	0.61	7.175438E-02	6.58	0.67	.8712565
6.94	0.61	7.167451E-02	6.59	0.67	.8697774
6.95	0.61	7.171205E-02	6.60	0.67	.8703004
6.96	0.61	7.186648E-02	6.61	0.67	.8721096
6.97	0.61	7.213716E-02	6.62	0.66	.8742302
6.98	0.60	7.201832E-02	6.63	0.66	.8727603
6.99	0.60	7.179305E-02	6.64	0.66	.8712916
7.00	0.60	7.168392E-02	6.65	0.66	.8698245
7.01	0.60	7.169021E-02	6.66	0.66	.8703719
7.02	0.60	7.181248E-02	6.67	0.66	.8724104
7.03	0.60	.0720483	6.68	0.65	.8743334
7.04	0.59	7.212613E-02	6.69	0.65	.8728758

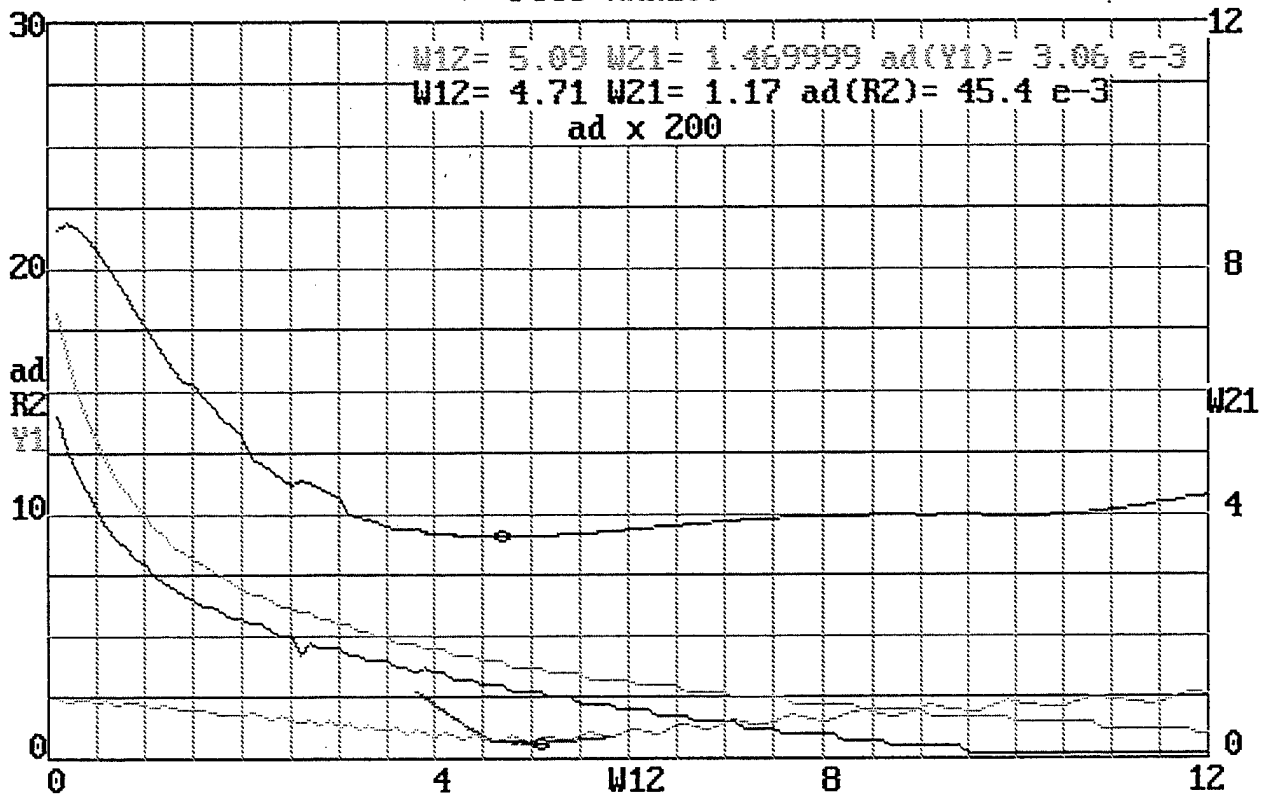
KUR81



W12	W21	100ad(R2)	W12	W21	100ad(Y1)
4.23	1.00	.0075643	4.04	1.05	.2624786
4.24	0.99	7.831138E-03	4.05	1.05	.2732766
4.25	0.99	7.487728E-03	4.06	1.04	.2788603
4.26	0.99	7.442111E-03	4.07	1.04	.2582169
4.27	0.99	7.691504E-03	4.08	1.04	.2685011
4.28	0.98	7.675257E-03	4.09	1.04	.2792025
4.29	0.98	7.438413E-03	4.10	1.03	.2632129
4.30	0.98	7.493583E-03	4.11	1.03	.2634287
4.31	0.98	7.838047E-03	4.12	1.03	.2740526
4.32	0.97	7.569187E-03	4.13	1.02	.2775049
4.33	0.97	7.42443E-03	4.14	1.02	.2580631
4.34	0.97	7.566217E-03	4.15	1.02	.2686107
4.35	0.96	7.851008E-03	4.16	1.02	.2791417
4.36	0.96	7.500693E-03	4.17	1.01	.2635944
4.37	0.96	7.434326E-03	4.18	1.01	.2628791
4.38	0.96	7.649102E-03	4.19	1.01	.273335
4.39	0.95	7.739752E-03	4.20	1.00	.2806091
4.40	0.95	7.459788E-03	4.21	1.00	.2591396
4.41	0.95	7.458442E-03	4.22	1.00	.2672422
4.42	0.95	7.733107E-03	4.23	1.00	.2776051
4.43	0.94	7.660426E-03	4.24	0.99	.2683175

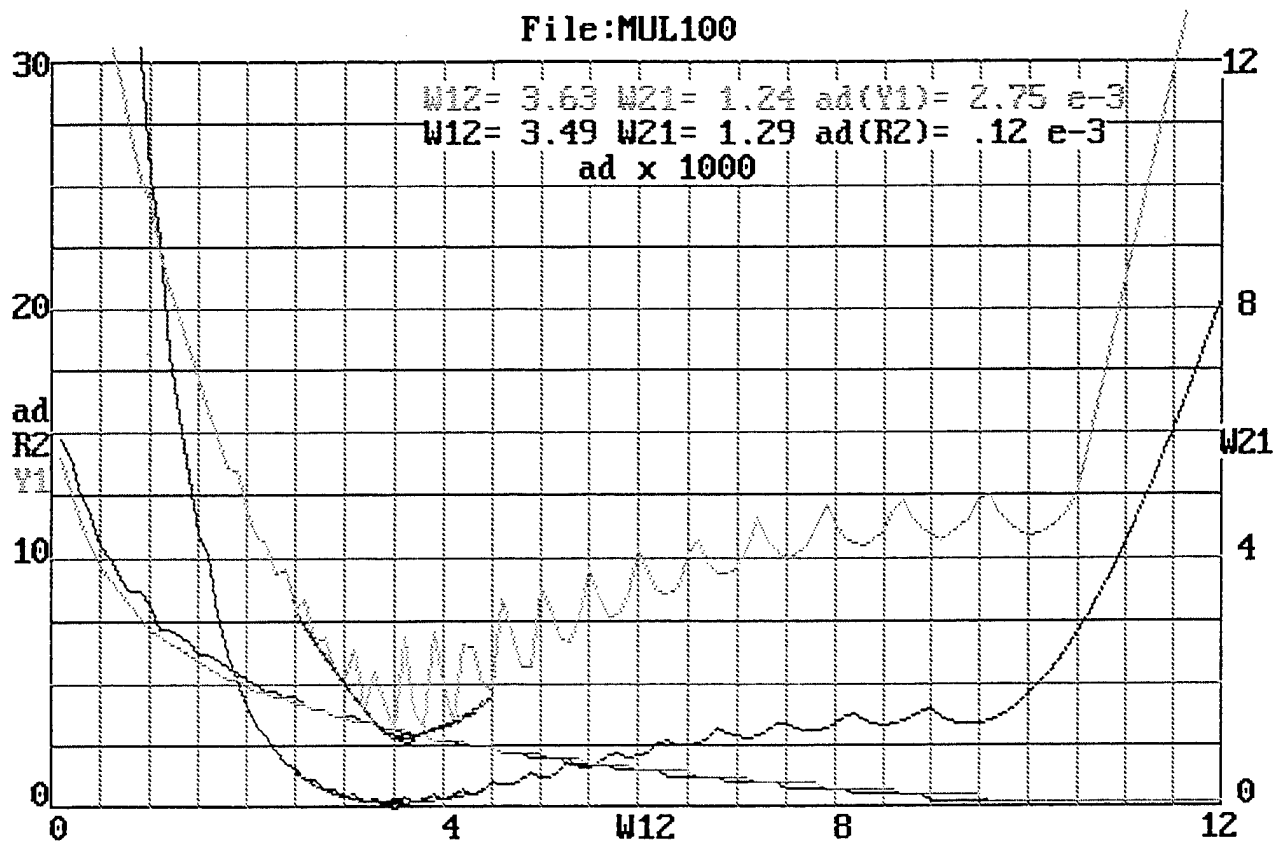
KUR100

File:HAR100



W12	W21	100ad(R2)	W12	W21	100ad(Y1)
4.61	1.20	4.541231	4.99	1.50	.3262282
4.62	1.20	4.541077	5.00	1.49	.3211403
4.63	1.19	4.540899	5.01	1.49	.3108037
4.64	1.19	4.540704	5.02	1.49	.317092
4.65	1.19	4.540598	5.03	1.49	.325768
4.66	1.18	4.540545	5.04	1.48	.3170955
4.67	1.18	4.540398	5.05	1.48	.3077436
4.68	1.18	4.540349	5.06	1.48	.3163648
4.69	1.18	4.540377	5.07	1.47	.3236389
4.70	1.17	4.540327	5.08	1.47	.3134382
4.71	1.17	4.540321	5.09	1.47	.306747
4.72	1.17	4.5404	5.10	1.47	.3153014
4.73	1.16	4.54048	5.11	1.46	.3203416
4.74	1.16	4.540518	5.12	1.46	.313021
4.75	1.16	4.540641	5.13	1.46	.3110981
4.76	1.16	4.540848	5.14	1.46	.3223944
4.77	1.15	4.540929	5.15	1.45	.3267455
4.78	1.15	4.541093	5.16	1.45	.3194916
4.79	1.15	4.541341	5.17	1.45	.3188205
4.80	1.14	4.541551	5.18	1.45	.3300464
4.81	1.14	4.54175	5.19	1.44	.333463

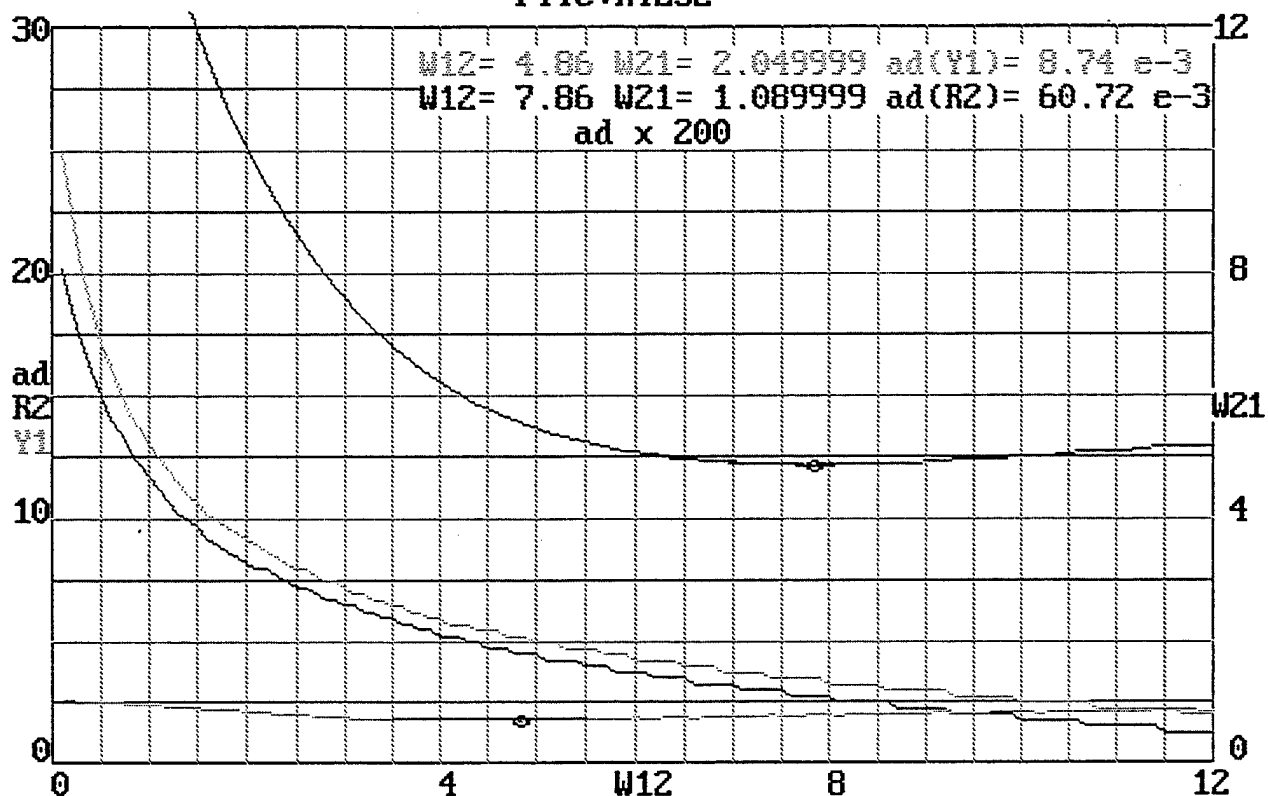
HAR100



W12	W21	100ad(R2)	W12	W21	100ad(Y1)
3.39	1.33	1.379775E-02	3.53	1.27	.2864083
3.40	1.33	1.391864E-02	3.54	1.27	.2776974
3.41	1.32	1.346907E-02	3.55	1.27	.2821426
3.42	1.32	1.342292E-02	3.56	1.26	.2853546
3.43	1.31	1.332153E-02	3.57	1.26	.2767139
3.44	1.31	1.310181E-02	3.58	1.26	.2795802
3.45	1.31	1.330154E-02	3.59	1.25	.2845632
3.46	1.30	1.296389E-02	3.60	1.25	.2759854
3.47	1.30	1.298143E-02	3.61	1.25	.2768543
3.48	1.29	1.301934E-02	3.62	1.24	.2840314
3.49	1.29	1.284829E-02	3.63	1.24	.2755231
3.50	1.29	1.308653E-02	3.64	1.24	.2784901
3.51	1.28	1.291168E-02	3.65	1.23	.2850665
3.52	1.28	1.295308E-02	3.66	1.23	.2800564
3.53	1.27	1.318152E-02	3.67	1.23	.280771
3.54	1.27	1.302038E-02	3.68	1.23	.2919595
3.55	1.27	.0132589	3.69	1.22	.2852897
3.56	1.26	1.329878E-02	3.70	1.22	.2827459
3.57	1.26	1.332662E-02	3.71	1.22	.2938588
3.58	1.26	1.374744E-02	3.72	1.21	.2906256
3.59	1.25	1.361063E-02	3.73	1.21	.2873705

MUL100

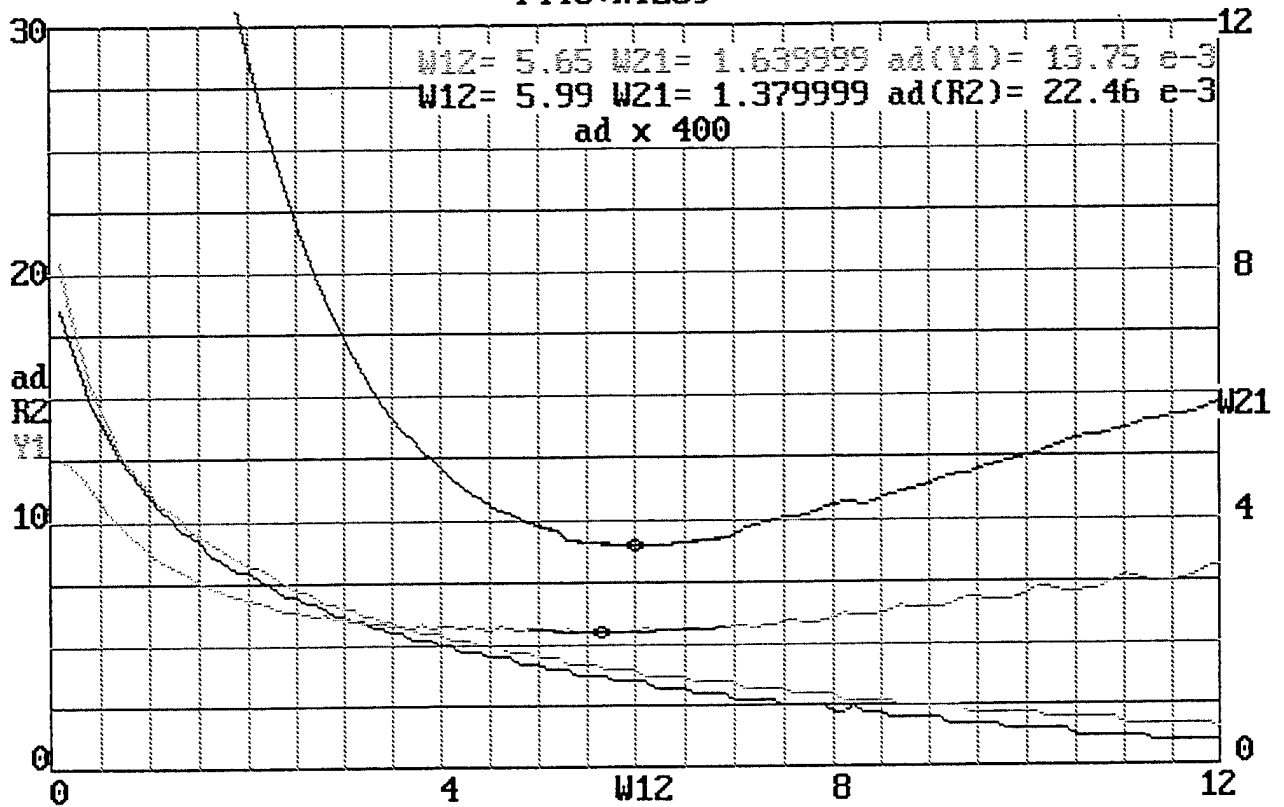
File:RIZ32



W12	W21	100ad(R2)	W12	W21	100ad(Y1)
7.76	1.11	6.073144	4.76	2.08	.8780259
7.77	1.11	6.073131	4.77	2.08	.8751822
7.78	1.10	6.073161	4.78	2.08	.8765312
7.79	1.10	6.072958	4.79	2.08	.8778761
7.80	1.10	6.072826	4.80	2.07	.8750031
7.81	1.10	6.072772	4.81	2.07	.8763423
7.82	1.10	6.072789	4.82	2.07	.8776812
7.83	1.10	6.072889	4.83	2.06	.8747912
7.84	1.09	6.072788	4.84	2.06	.8761204
7.85	1.09	6.072692	4.85	2.06	.8774509
7.86	1.09	6.072671	4.86	2.05	.8746216
7.87	1.09	6.072724	4.87	2.05	.8758654
7.88	1.09	6.072849	4.88	2.05	.8771846
7.89	1.08	6.072901	4.89	2.04	.8748004
7.90	1.08	6.072837	4.90	2.04	.8755734
7.91	1.08	6.072845	4.91	2.04	.8768888
7.92	1.08	6.072923	4.92	2.03	.8750586
7.93	1.08	6.073076	4.93	2.03	.8752502
7.94	1.07	6.07328	4.94	2.03	.8767518
7.95	1.07	6.073244	4.95	2.02	.8758283
7.96	1.07	6.073278	4.96	2.02	.8757027

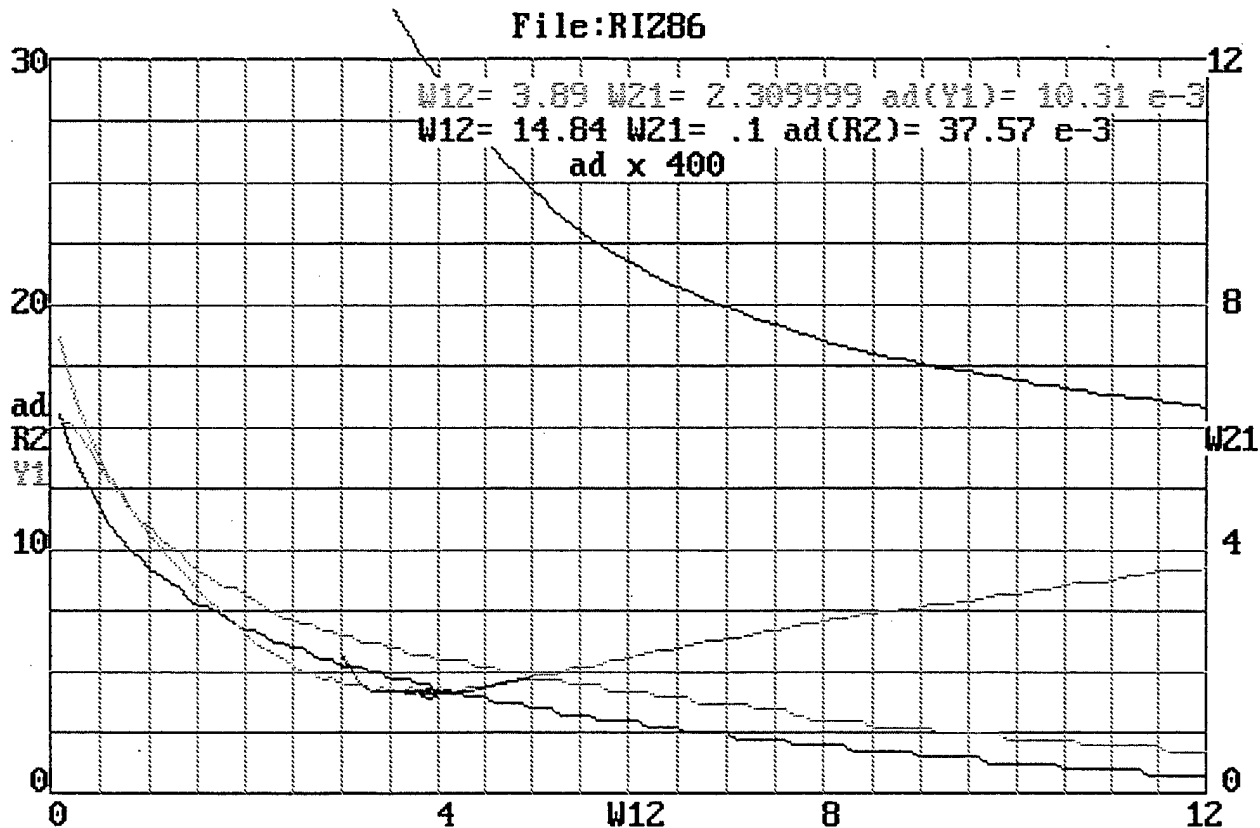
RIZ32

File:RIZ69



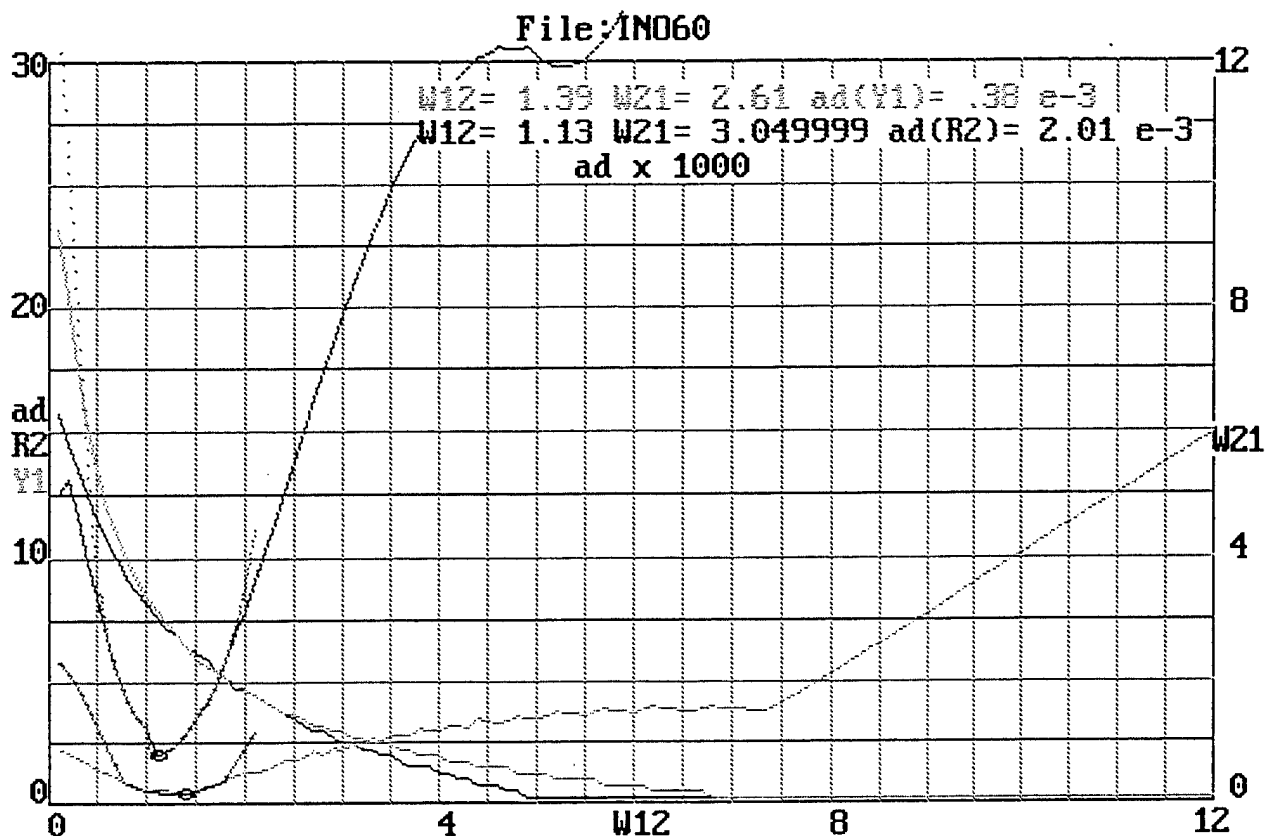
W12	W21	100ad(R2)	W12	W21	100ad(Y1)
5.89	1.41	2.247635	5.55	1.69	1.376914
5.90	1.40	2.247418	5.56	1.69	1.376698
5.91	1.40	2.247111	5.57	1.69	1.376484
5.92	1.40	2.246917	5.58	1.68	1.376421
5.93	1.40	2.246837	5.59	1.68	1.376204
5.94	1.39	2.246685	5.60	1.68	1.375986
5.95	1.39	2.246487	5.61	1.68	1.375772
5.96	1.39	2.246401	5.62	1.67	1.375707
5.97	1.39	2.246428	5.63	1.66	1.375655
5.98	1.38	2.246348	5.64	1.65	1.375614
5.99	1.38	2.246254	5.65	1.64	1.375581
6.00	1.38	2.246271	5.66	1.64	1.375753
6.01	1.38	2.246399	5.67	1.64	1.376075
6.02	1.37	2.246393	5.68	1.63	1.376207
6.03	1.37	2.246399	5.69	1.63	1.376391
6.04	1.37	2.246515	5.70	1.63	1.376711
6.05	1.37	2.24674	5.71	1.63	1.377028
6.06	1.36	2.246814	5.72	1.62	1.377068
6.07	1.36	2.246914	5.73	1.62	1.377334
6.08	1.36	2.247122	5.74	1.62	1.377652
6.09	1.36	2.247439	5.75	1.62	1.377968

RIZ69



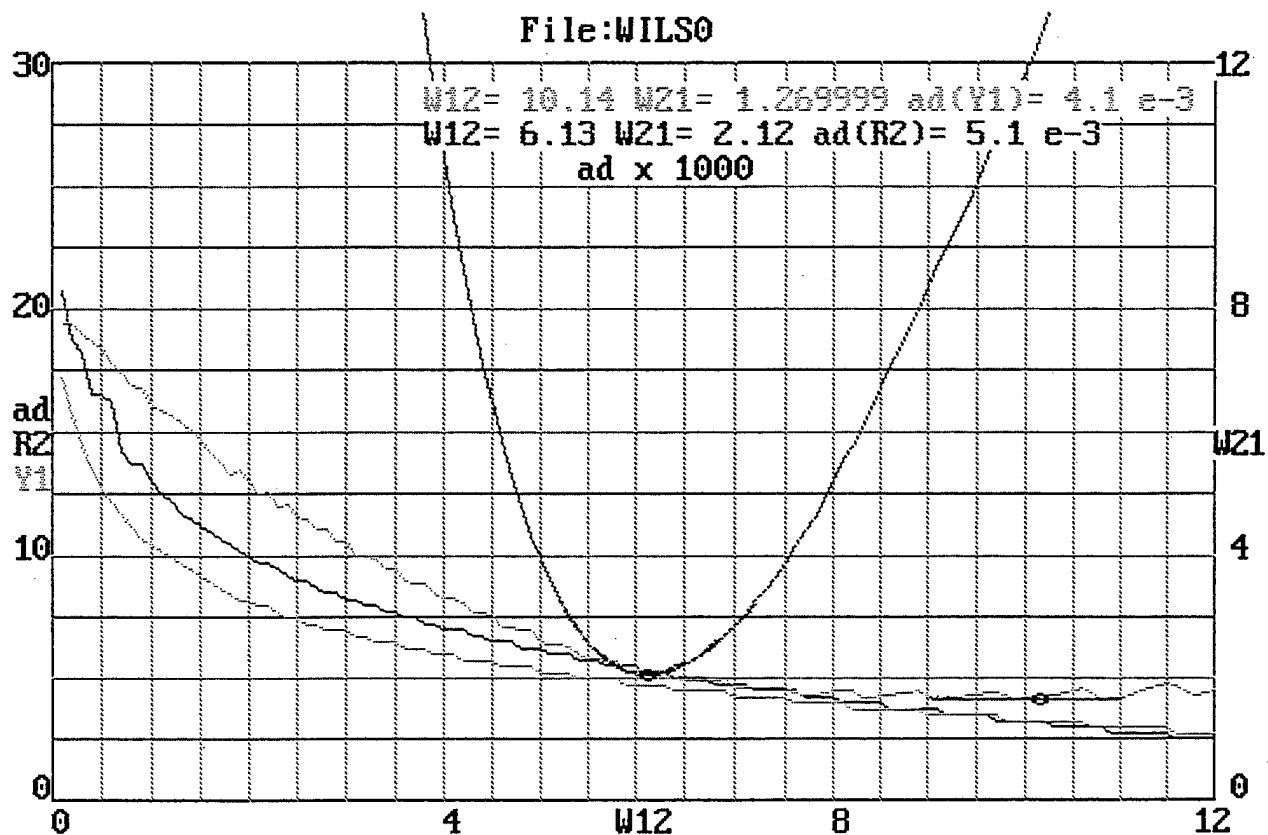
W12	W21	100ad(R2)	W12	W21	100ad(Y1)
14.74	0.10	3.758046	3.79	2.34	1.034983
14.75	0.10	3.757896	3.80	2.34	1.036168
14.76	0.10	3.757765	3.81	2.33	1.037819
14.77	0.10	3.75765	3.82	2.33	1.034908
14.78	0.10	3.757548	3.83	2.33	1.034012
14.79	0.10	3.757462	3.84	2.32	1.037762
14.80	0.10	3.757392	3.85	2.32	1.034863
14.81	0.10	3.757334	3.86	2.32	1.032582
14.82	0.10	3.757292	3.87	2.31	1.037736
14.83	0.10	3.757264	3.88	2.31	1.034848
14.84	0.10	3.757251	3.89	2.31	1.031976
14.85	0.10	3.757252	3.90	2.30	1.037741
14.86	0.10	3.757267	3.91	2.30	1.034863
14.87	0.10	3.757295	3.92	2.30	1.031999
14.88	0.10	3.757341	3.93	2.30	1.036061
14.89	0.10	3.7574	3.94	2.29	1.034906
14.90	0.10	3.75747	3.95	2.29	1.032051
14.91	0.10	3.757557	3.96	2.29	1.035221
14.92	0.10	3.75766	3.97	2.28	1.034975
14.93	0.10	3.757775	3.98	2.28	1.032131
14.94	0.10	3.757906	3.99	2.28	1.034642

RIZ86



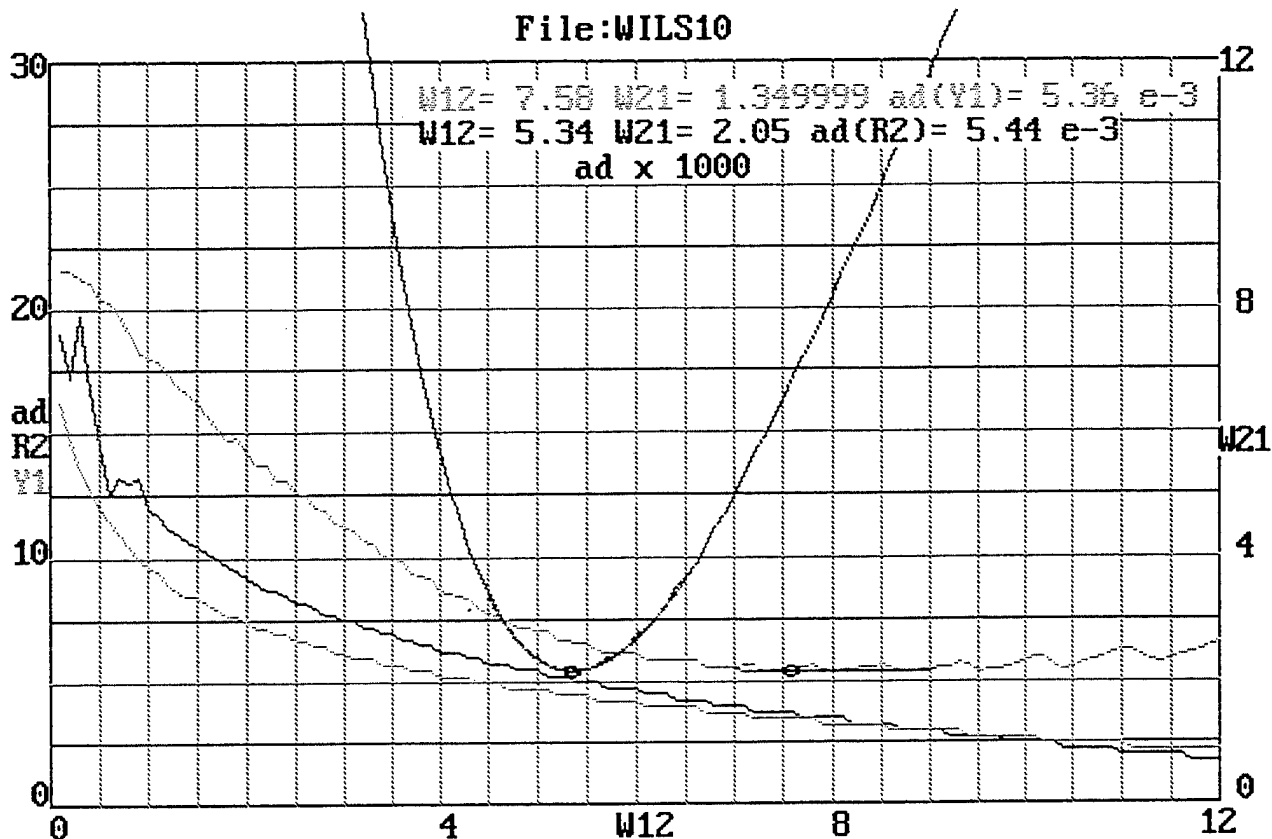
W12	W21	100ad(R2)	W12	W21	100ad(Y1)
1.03	3.37	.2252203	1.29	2.78	4.103581E-02
1.04	3.28	.2132558	1.30	2.76	4.010797E-02
1.05	3.21	.2089316	1.31	2.74	4.043579E-02
1.06	3.19	.2071562	1.32	2.73	4.096329E-02
1.07	3.17	.2056338	1.33	2.71	3.986359E-02
1.08	3.15	.2043593	1.34	2.69	3.931423E-02
1.09	3.13	.2033347	1.35	2.67	.0403752
1.10	3.11	.2025521	1.36	2.66	3.916124E-02
1.11	3.09	.2020123	1.37	2.64	.0388523
1.12	3.07	.201713	1.38	2.63	3.943741E-02
1.13	3.05	.2016507	1.39	2.61	3.800591E-02
1.14	3.03	.201824	1.40	2.59	3.904501E-02
1.15	3.02	.2022099	1.41	2.58	3.802081E-02
1.16	2.97	.2035483	1.42	2.56	3.948907E-02
1.17	2.90	.2098246	1.43	2.55	4.109442E-02
1.18	2.96	.2123723	1.44	2.53	4.211565E-02
1.19	2.94	.2136641	1.45	2.52	4.391372E-02
1.20	2.92	.2151796	1.46	2.50	4.492402E-02
1.21	2.91	.2168832	1.47	2.49	4.647672E-02
1.22	2.89	.2187918	1.48	2.47	.0479132
1.23	2.87	.2209195	1.49	2.46	4.877845E-02

INO60



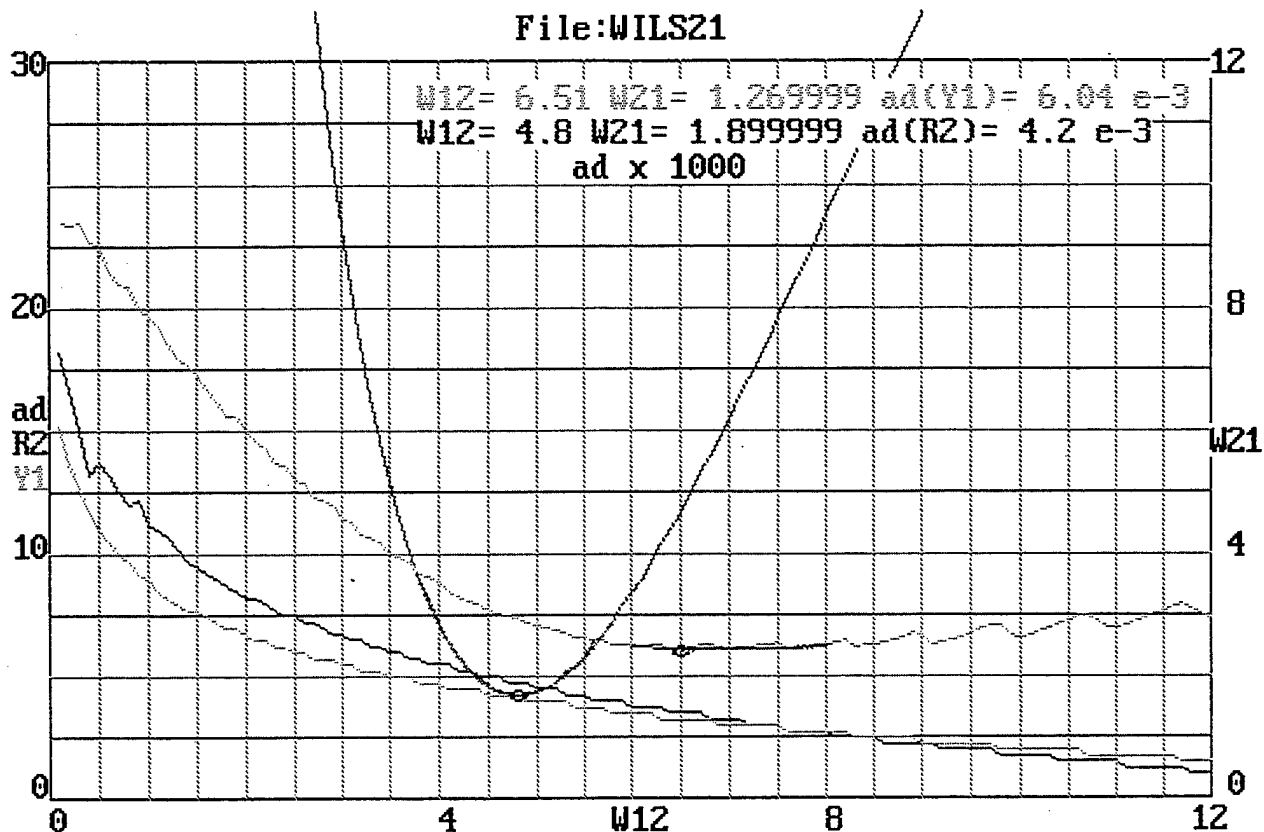
W12	W21	100ad(R2)	W12	W21	100ad(Y1)
6.03	2.15	.5130672	10.04	1.28	.413785
6.04	2.15	.5126854	10.05	1.28	.4106277
6.05	2.14	.5120887	10.06	1.28	.4106051
6.06	2.14	.5116356	10.07	1.28	.4110658
6.07	2.14	.5113696	10.08	1.28	.4115266
6.08	2.13	.5111506	10.09	1.28	.4119873
6.09	2.13	.5108098	10.10	1.28	.4124469
6.10	2.13	.5106551	10.11	1.28	.4129065
6.11	2.13	.5106857	10.12	1.28	.4133666
6.12	2.12	.5105844	10.13	1.27	.4135251
6.13	2.12	.5105373	10.14	1.27	.4103923
6.14	2.12	.510673	10.15	1.27	.4106271
6.15	2.11	.5109552	10.16	1.27	.4110831
6.16	2.11	.5110108	10.17	1.27	.4115409
6.17	2.11	.5112488	10.18	1.27	.411998
6.18	2.11	.5116675	10.19	1.27	.4124546
6.19	2.10	.5120709	10.20	1.27	.4129106
6.20	2.10	.5124052	10.21	1.27	.4133648
6.21	2.10	.5129189	10.22	1.26	.4135651
6.22	2.10	.5136121	10.23	1.26	.4104597
6.23	2.09	.5141403	10.24	1.26	.4106296

WILSO



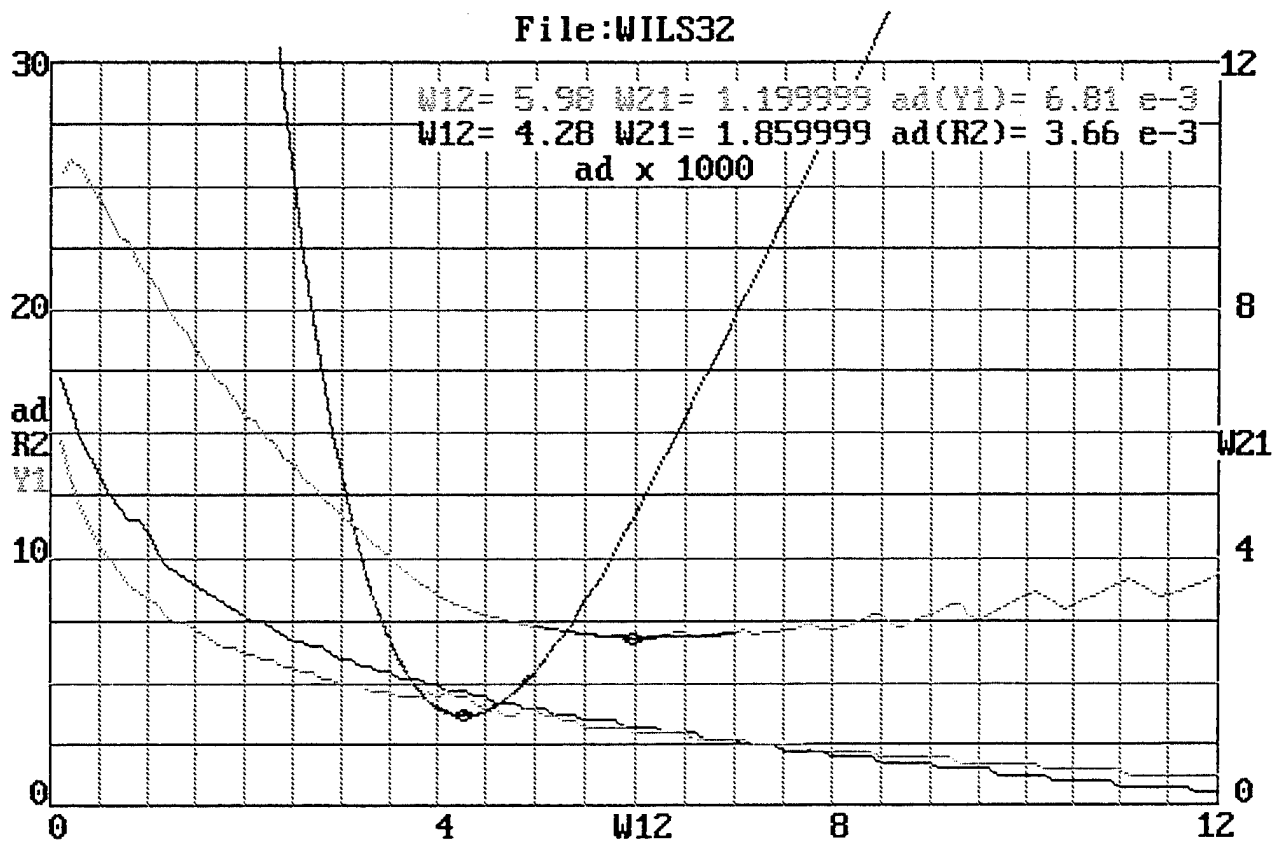
W12	W21	100ad(R2)	W12	W21	100ad(Y1)
5.24	2.08	.5483326	7.48	1.37	.5384863
5.25	2.08	.5476148	7.49	1.37	.5390781
5.26	2.07	.5470276	7.50	1.37	.5396706
5.27	2.07	.5462773	7.51	1.36	.5379868
5.28	2.07	.5457615	7.52	1.36	.5368036
5.29	2.06	.5454445	7.53	1.36	.5373943
5.30	2.06	.5448931	7.54	1.36	.5379856
5.31	2.06	.5445721	7.55	1.36	.5385733
5.32	2.06	.5444776	7.56	1.36	.5391598
5.33	2.05	.5441653	7.57	1.36	.5397463
5.34	2.05	.5440323	7.58	1.35	.5363047
5.35	2.05	.5441256	7.59	1.35	.5368906
5.36	2.04	.5440861	7.60	1.35	.5374771
5.37	2.04	.5441338	7.61	1.35	.5380601
5.38	2.04	.5444056	7.62	1.35	.5386448
5.39	2.03	.5446398	7.63	1.35	.5392241
5.40	2.03	.5448646	7.64	1.34	.5393231
5.41	2.03	.5453085	7.65	1.34	.5363805
5.42	2.02	.5458224	7.66	1.34	.5369605
5.43	2.02	.546215	7.67	1.34	.5375398
5.44	2.02	.5468268	7.68	1.34	.5381197

WILS10



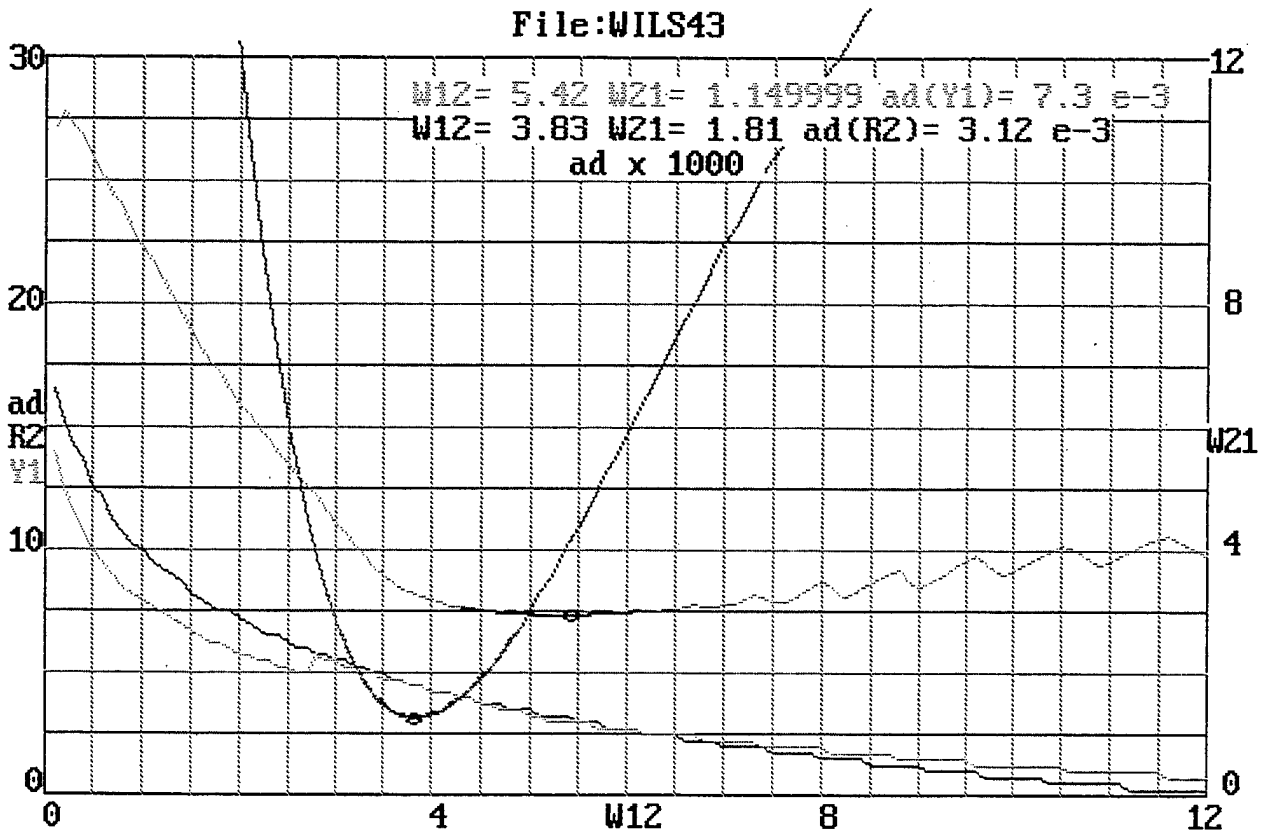
W12	W21	100ad(R2)	W12	W21	100ad(Y1)
4.70	1.94	.4237205	6.41	1.29	.6061041
4.71	1.93	.4229244	6.42	1.29	.6057799
4.72	1.93	.4222626	6.43	1.29	.6059963
4.73	1.93	.4218698	6.44	1.29	.606646
4.74	1.92	.4212578	6.45	1.28	.6042248
4.75	1.92	.4208533	6.46	1.28	.6043971
4.76	1.91	.4207113	6.47	1.28	.605045
4.77	1.91	.4202912	6.48	1.28	.605693
4.78	1.91	.4201364	6.49	1.28	.6063354
4.79	1.90	.4201827	6.50	1.28	.606978
4.80	1.90	.4200074	6.51	1.27	.604095
4.81	1.90	.4200956	6.52	1.27	.604738
4.82	1.89	.4203349	6.53	1.27	.6053818
4.83	1.89	.4203961	6.54	1.27	.6060231
4.84	1.89	.4207167	6.55	1.27	.606665
4.85	1.88	.4211503	6.56	1.26	.6071265
4.86	1.88	.4214389	6.57	1.26	.6044316
4.87	1.88	.4219835	6.58	1.26	.6050718
4.88	1.87	.4226112	6.59	1.26	.6057101
4.89	1.87	.4231202	6.60	1.26	.6063485
4.90	1.87	.4238823	6.61	1.26	.6069833

WILS21



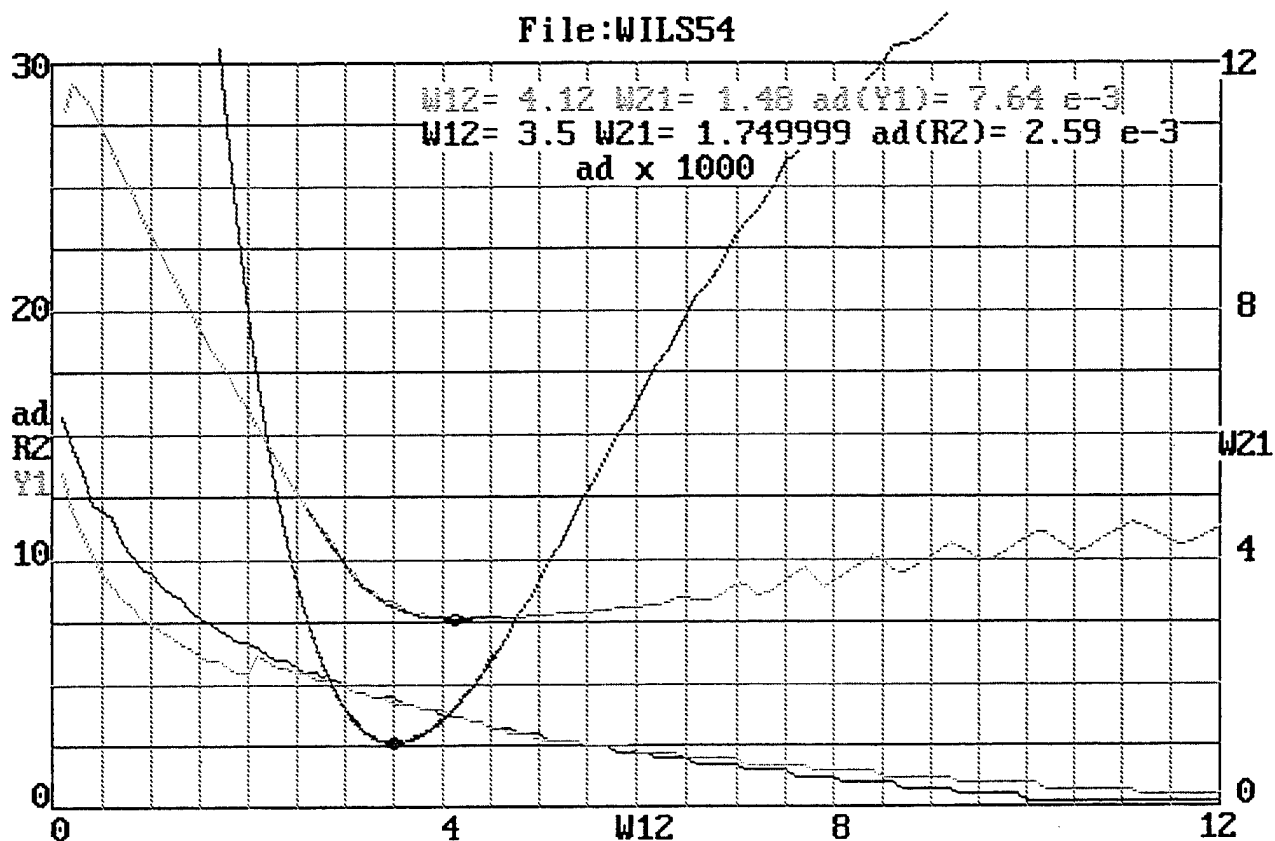
W12	W21	100ad(R2)	W12	W21	100ad(Y1)
4.18	1.90	.3700594	5.88	1.23	.6846601
4.19	1.89	.369393	5.89	1.23	.6840026
4.20	1.89	.3686229	5.90	1.22	.6843436
4.21	1.89	.3681703	5.91	1.22	.6836981
4.22	1.88	.3676038	5.92	1.22	.6830472
4.23	1.88	.3671933	5.93	1.21	.6834209
4.24	1.87	.3670019	5.94	1.21	.6827796
4.25	1.87	.3666298	5.95	1.21	.6821358
4.26	1.87	.366567	5.96	1.21	.6827182
4.27	1.86	.3664776	5.97	1.21	.6833345
4.28	1.86	.3664469	5.98	1.20	.6812662
4.29	1.86	.3667191	5.99	1.20	.6818652
4.30	1.85	.3667315	6.00	1.20	.6824828
4.31	1.85	.3670303	6.01	1.20	.6830978
4.32	1.84	.3674258	6.02	1.20	.6837125
4.33	1.84	.3677446	6.03	1.19	.684318
4.34	1.84	.3683614	6.04	1.19	.682255
4.35	1.83	.3688595	6.05	1.19	.6828701
4.36	1.83	.3694894	6.06	1.19	.6834811
4.37	1.82	.3703759	6.07	1.19	.6840956
4.38	1.82	.3710161	6.08	1.19	.6847042

WILS32



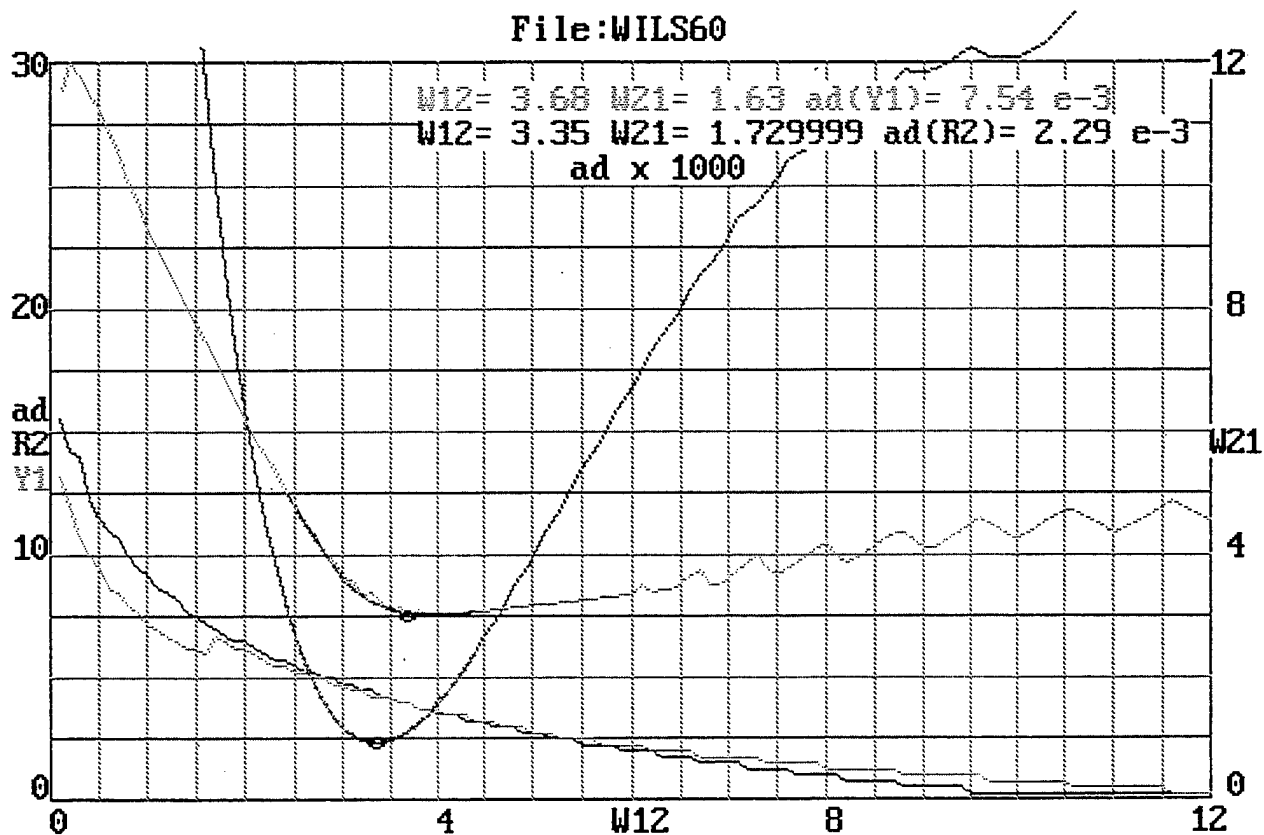
W12	W21	100ad(R2)	W12	W21	100ad(Y1)
3.73	1.85	.3175168	5.32	1.19	.73164
3.74	1.85	.3164978	5.33	1.18	.7308072
3.75	1.84	.3158177	5.34	1.18	.7309956
3.76	1.84	.3149095	5.35	1.17	.7313955
3.77	1.84	.3143636	5.36	1.17	.7303483
3.78	1.83	.3137229	5.37	1.17	.7309228
3.79	1.83	.3132786	5.38	1.16	.7309813
3.80	1.82	.3129342	5.39	1.16	.7302767
3.81	1.82	.3125848	5.40	1.16	.7308507
3.82	1.81	.3125407	5.41	1.15	.730623
3.83	1.81	.3122814	5.42	1.15	.7302058
3.84	1.81	.3123727	5.43	1.15	.7307851
3.85	1.80	.3123616	5.44	1.15	.7313621
3.86	1.80	.3125348	5.45	1.15	.7319373
3.87	1.79	.312829	5.46	1.14	.7307231
3.88	1.79	.3130765	5.47	1.14	.7313043
3.89	1.79	.3136678	5.48	1.14	.7318825
3.90	1.78	.3139939	5.49	1.14	.7324576
3.91	1.78	.314651	5.50	1.13	.7329851
3.92	1.77	.3152826	5.51	1.13	.7318312
3.93	1.77	.3160011	5.52	1.13	.7324083

WILS43



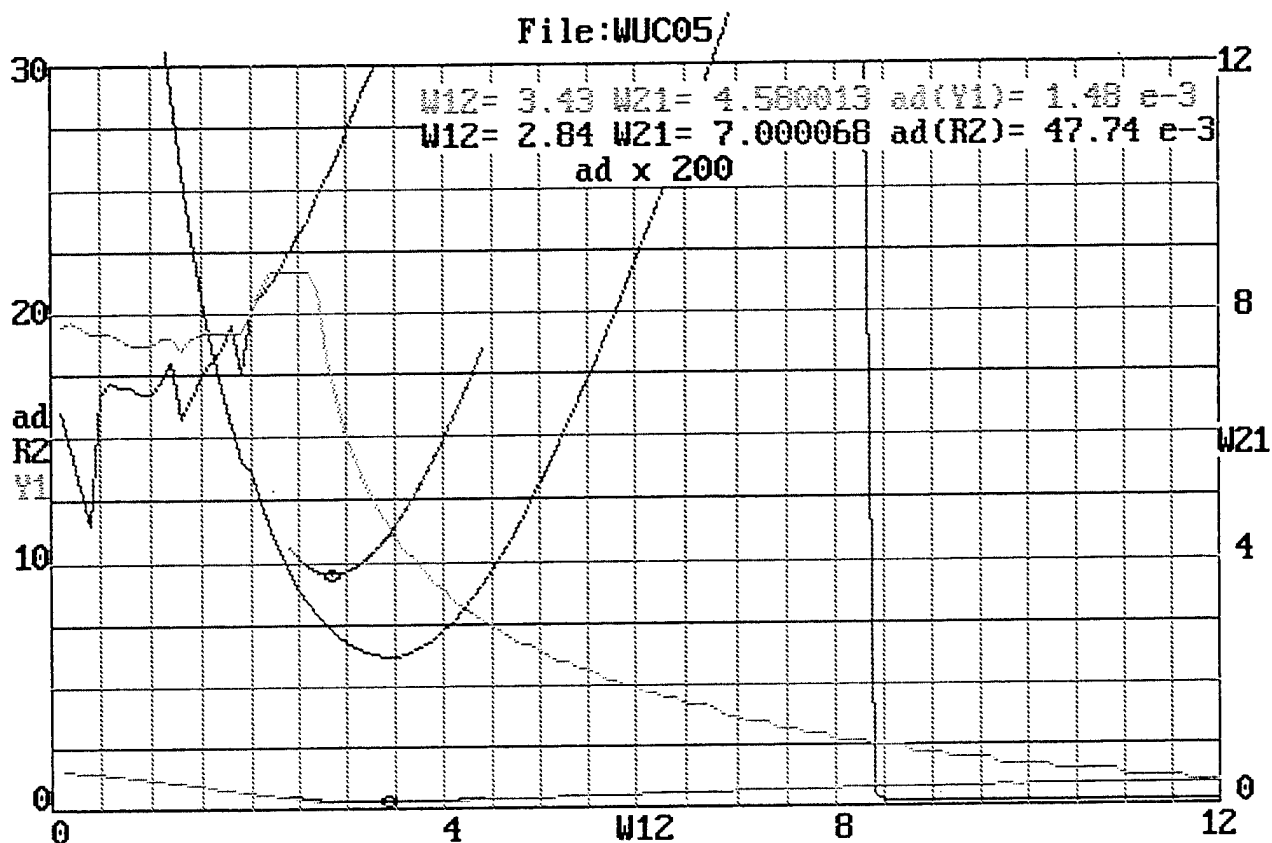
W12	W21	100ad(R2)	W12	W21	100ad(Y1)
3.40	1.80	.264886	4.02	1.54	.7650274
3.41	1.79	.2639755	4.03	1.53	.7648278
3.42	1.79	.2630649	4.04	1.53	.7649565
3.43	1.78	.2623907	4.05	1.52	.7647598
3.44	1.78	.2616384	4.06	1.52	.7648951
3.45	1.77	.2612032	4.07	1.51	.764708
3.46	1.77	.2606029	4.08	1.50	.764627
3.47	1.77	.2603994	4.09	1.50	.7646735
3.48	1.76	.2599526	4.10	1.49	.7644803
3.49	1.76	.2598899	4.11	1.49	.7646525
3.50	1.75	.259682	4.12	1.48	.7644671
3.51	1.75	.2597545	4.13	1.48	.7646501
3.52	1.74	.2597838	4.14	1.47	.7644695
3.53	1.74	.259984	4.15	1.47	.7646608
3.54	1.73	.260257	4.16	1.46	.7644826
3.55	1.73	.2605771	4.17	1.46	.7646871
3.56	1.72	.2610937	4.18	1.45	.7645118
3.57	1.72	.2615276	4.19	1.45	.7647252
3.58	1.71	.2622904	4.20	1.44	.7645525
3.59	1.71	.2628331	4.21	1.44	.7647759
3.60	1.71	.2637467	4.22	1.43	.764609

WILS54



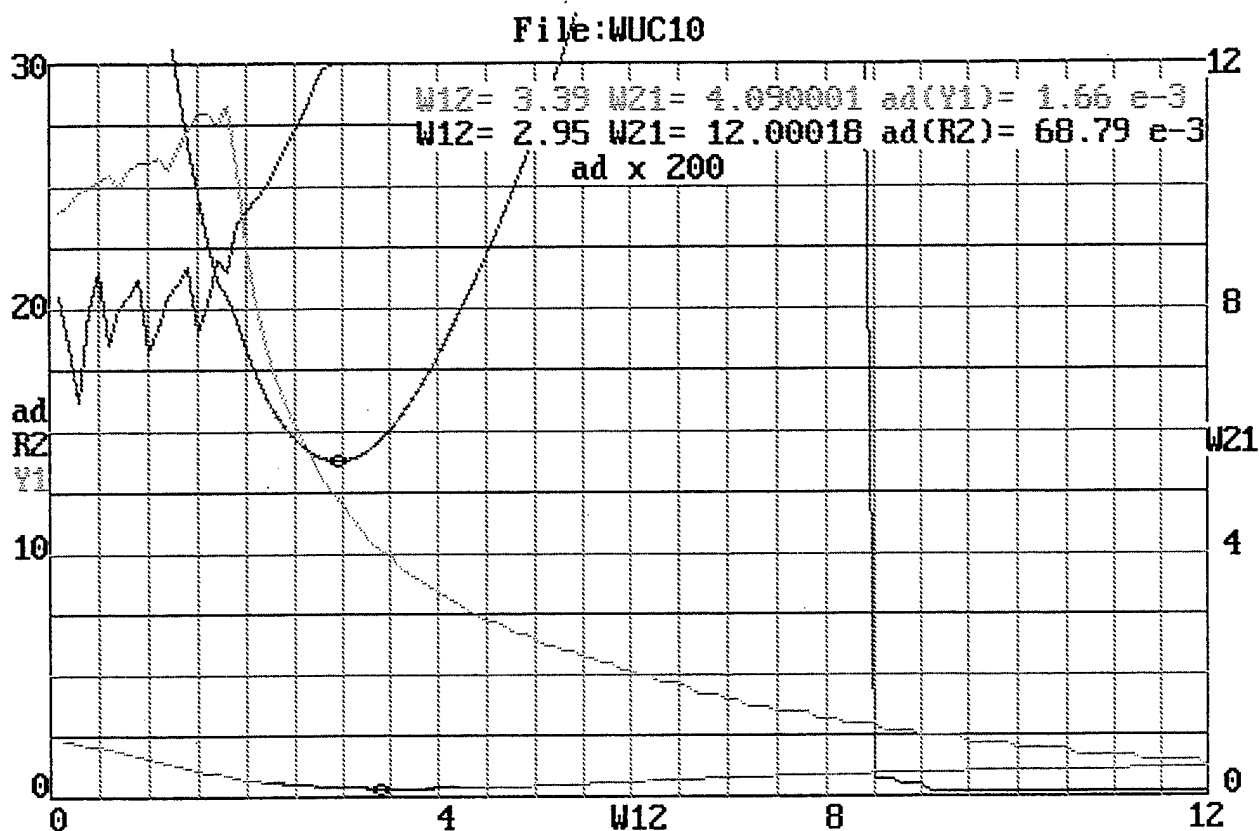
W12	W21	100ad(R2)	W12	W21	100ad(Y1)
3.25	1.78	.2335541	3.58	1.66	.7701315
3.26	1.78	.2328041	3.59	1.66	.7671249
3.27	1.77	.2318799	3.60	1.66	.7650405
3.28	1.77	.2313228	3.61	1.65	.7657683
3.29	1.76	.2306062	3.62	1.65	.7627791
3.30	1.76	.2302343	3.63	1.65	.7637602
3.31	1.75	.2297267	3.64	1.64	.7615215
3.32	1.75	.2295306	3.65	1.64	.7585472
3.33	1.74	.2292312	3.66	1.63	.7603377
3.34	1.74	.2292037	3.67	1.63	.7573861
3.35	1.73	.2291171	3.68	1.63	.7549447
3.36	1.73	.2292506	3.69	1.62	.7562995
3.37	1.72	.2293747	3.70	1.62	.7550991
3.38	1.72	.2296623	3.71	1.61	.7554406
3.39	1.71	.2299986	3.72	1.61	.7552785
3.40	1.71	.2304324	3.73	1.61	.7551098
3.41	1.70	.2309843	3.74	1.60	.7554847
3.42	1.70	.2315567	3.75	1.60	.755328
3.43	1.69	.2323235	3.76	1.60	.7551665
3.44	1.69	.2330289	3.77	1.59	.7555718
3.45	1.68	.2340116	3.78	1.59	.7554233

WILS60



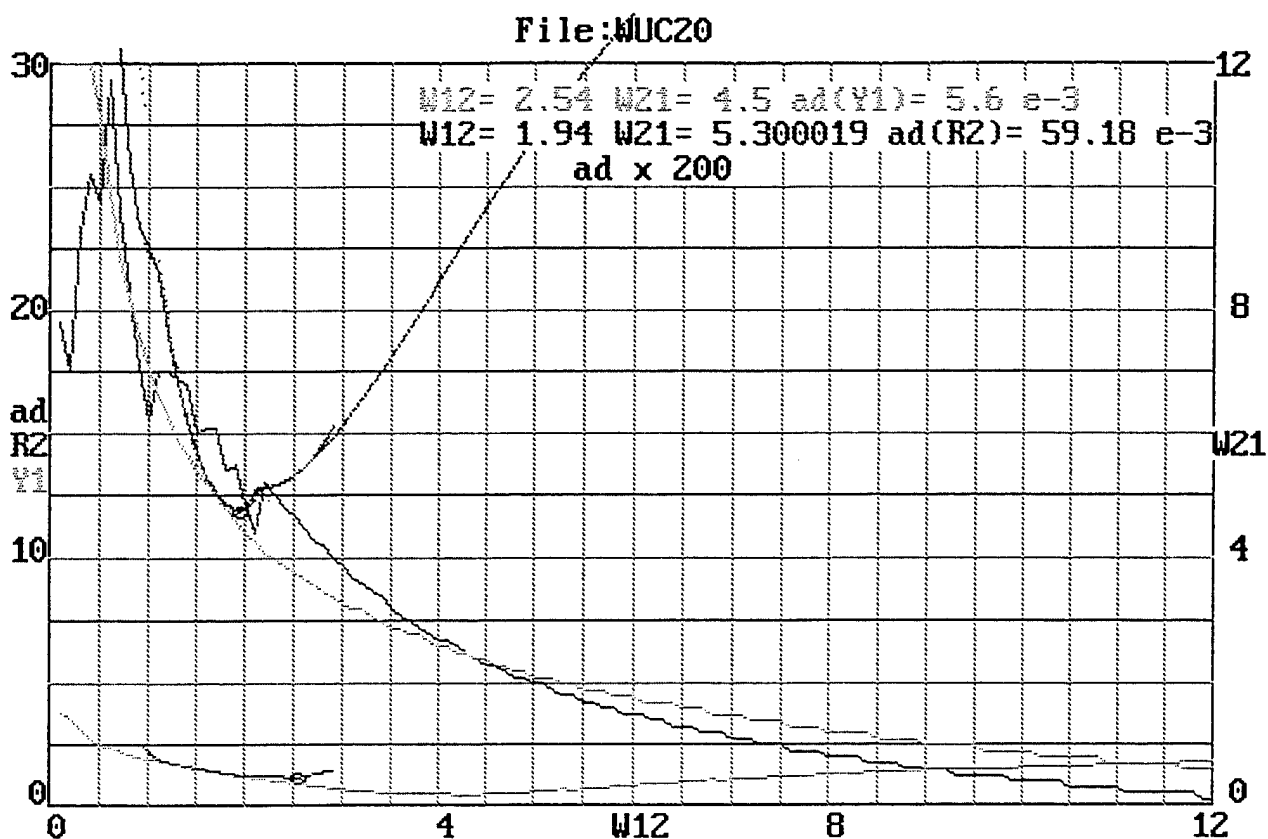
W12	W21	100ad(R2)	W12	W21	100ad(Y1)
2.74	7.00	4.800913	3.33	4.83	.1490931
2.75	7.00	4.795922	3.34	4.81	.1490454
2.76	7.00	4.791462	3.35	4.78	.1489401
2.77	7.00	4.787544	3.36	4.76	.1490911
2.78	7.00	4.784148	3.37	4.73	.1489659
2.79	7.00	4.781297	3.38	4.70	.1490335
2.80	7.00	4.778965	3.39	4.68	.1489619
2.81	7.00	4.777157	3.40	4.65	.1490404
2.82	7.00	4.775878	3.41	4.63	.1489341
2.83	7.00	4.775101	3.42	4.61	.1490464
2.84	7.00	4.774837	3.43	4.58	.1488725
2.85	7.00	4.775088	3.44	4.56	.1489739
2.86	7.00	4.775847	3.45	4.54	.1490692
2.87	7.00	4.777097	3.46	4.51	.1488874
2.88	7.00	4.778853	3.47	4.49	.148955
2.89	7.00	4.781098	3.48	4.47	.1490315
2.90	7.00	4.783829	3.49	4.45	.149104
2.91	7.00	4.78705	3.50	4.42	.1489689
2.92	7.00	4.790761	3.51	4.40	.1489351
2.93	7.00	4.794948	3.52	4.38	.1489888
2.94	7.00	4.799614	3.53	4.36	.1490364

WUC05



W12	W21	100ad(R2)	W12	W21	100ad(Y1)
2.85	12.00	6.904768	3.29	4.24	.1723783
2.86	12.00	6.899918	3.30	4.22	.172059
2.87	12.00	6.895601	3.31	4.21	.171274
2.88	12.00	6.891788	3.32	4.19	.1707809
2.89	12.00	6.888496	3.33	4.18	.1701542
2.90	12.00	6.88572	3.34	4.16	.1695931
2.91	12.00	6.883446	3.35	4.15	.16902
2.92	12.00	6.881675	3.36	4.13	.1684981
2.93	12.00	6.880409	3.37	4.12	.1678756
2.94	12.00	6.87963	3.38	4.10	.1674916
2.95	12.00	6.879355	3.39	4.09	.1667142
2.96	12.00	6.879555	3.40	4.08	.1670974
2.97	12.00	6.880257	3.41	4.06	.1668785
2.98	12.00	6.881433	3.42	4.05	.1672566
2.99	12.00	6.883089	3.43	4.03	.1671357
3.00	12.00	6.885217	3.44	4.02	.1673945
3.01	12.00	6.887817	3.45	4.01	.1677598
3.02	12.00	6.890888	3.46	3.99	.1675086
3.03	12.00	6.894424	3.47	3.98	.1678646
3.04	12.00	6.898419	3.48	3.96	.1679599
3.05	12.00	6.90287	3.49	3.95	.167948

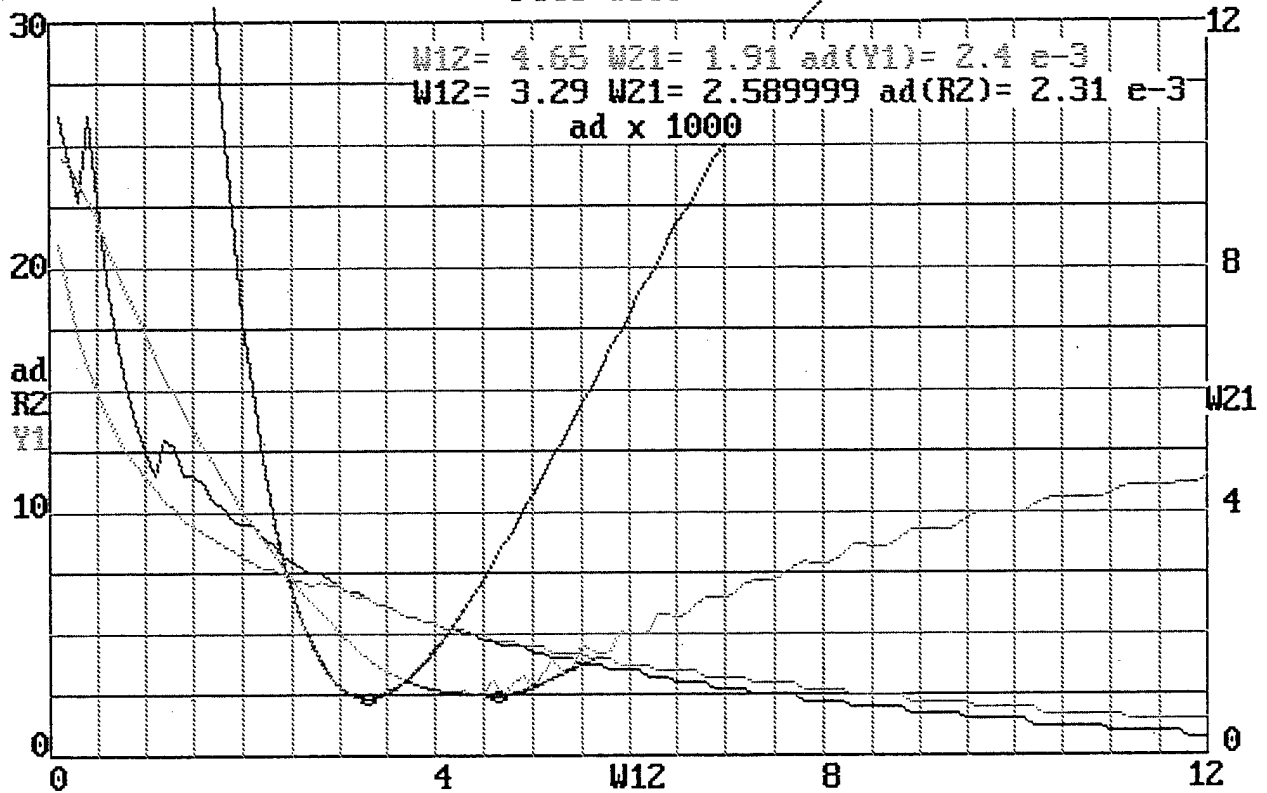
WUC10



W12	W21	100ad(R2)	W12	W21	100ad(Y1)
1.84	5.90	6.054259	2.44	4.50	.570631
1.85	5.88	6.028666	2.45	4.50	.5696007
1.86	5.81	6.004812	2.46	4.50	.5685661
1.87	5.74	5.984205	2.47	4.50	.5675282
1.88	5.68	5.965573	2.48	4.50	.5664885
1.89	5.61	5.951319	2.49	4.50	.565442
1.90	5.55	5.938266	2.50	4.50	.5643956
1.91	5.48	5.930829	2.51	4.50	.5633456
1.92	5.42	5.9238	2.52	4.50	.5622915
1.93	5.36	5.919668	2.53	4.50	.5612348
1.94	5.30	5.91856	2.54	4.50	.5601746
1.95	5.24	5.920568	2.55	4.50	.5625316
1.96	5.18	5.925826	2.56	4.50	.5670581
1.97	5.13	5.928157	2.57	4.50	.5715796
1.98	5.07	5.939626	2.58	4.50	.5760942
1.99	5.02	5.947219	2.59	4.50	.5806038
2.00	4.96	5.965326	2.60	4.50	.5851116
2.01	4.91	5.978555	2.61	4.50	.58961
2.02	4.86	5.994447	2.62	4.50	.5941051
2.03	4.81	6.013089	2.63	4.50	.5985975
2.04	4.76	6.034579	2.64	4.50	.6030815

WUC20

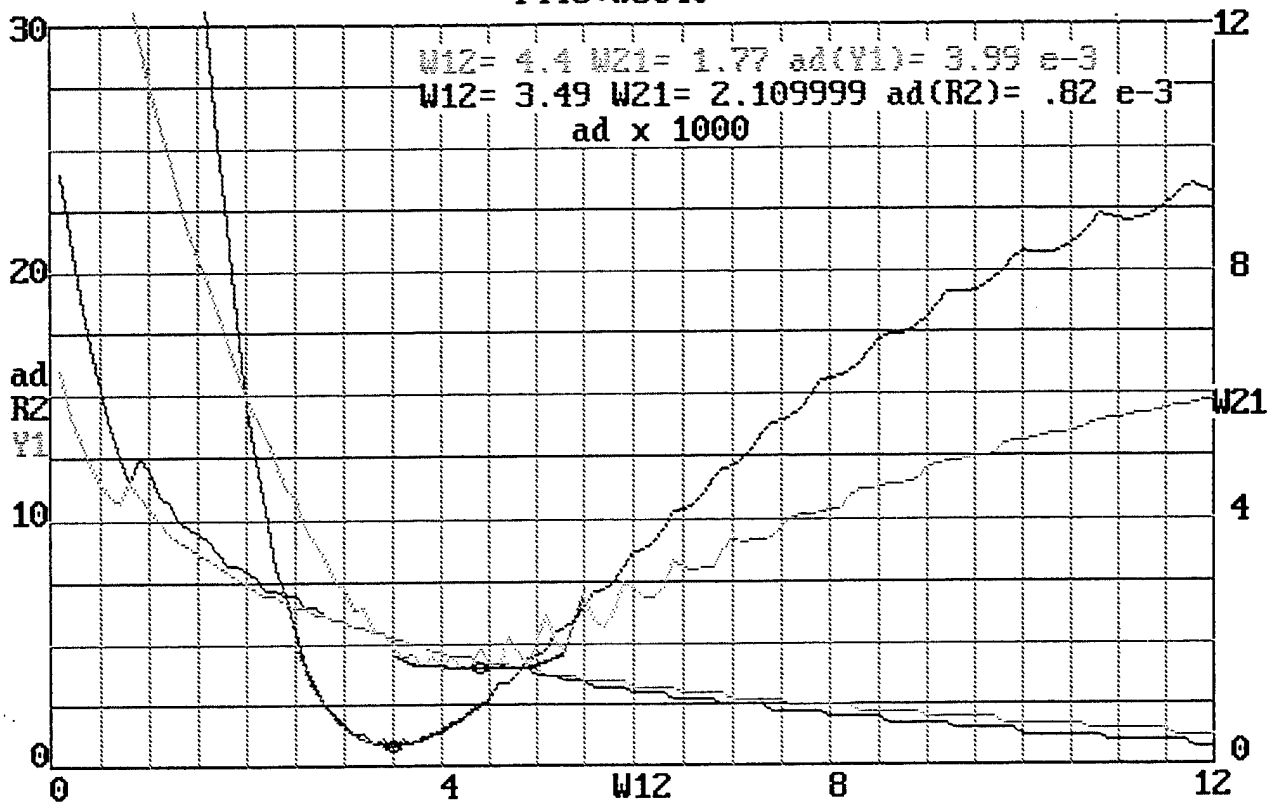
File:WUC30



W12	W21	100ad(R2)	W12	W21	100ad(Y1)
3.19	2.66	.2368937	4.55	1.94	.2432951
3.20	2.65	.235875	4.56	1.94	.2432747
3.21	2.64	.2350693	4.57	1.94	.2432542
3.22	2.64	.2342911	4.58	1.93	.2431367
3.23	2.63	.2335701	4.59	1.93	.2421584
3.24	2.62	.2330642	4.60	1.93	.2421362
3.25	2.62	.2326718	4.61	1.93	.2430218
3.26	2.61	.2322407	4.62	1.92	.2410557
3.27	2.60	.2320303	4.63	1.92	.2418237
3.28	2.60	.2319912	4.64	1.91	.2441917
3.29	2.59	.231849	4.65	1.91	.2405865
3.30	2.58	.2319297	4.66	1.91	.2439346
3.31	2.58	.2322139	4.67	1.90	.2454766
3.32	2.57	.2323607	4.68	1.90	.2426412
3.33	2.56	.2327323	4.69	1.90	.2459748
3.34	2.56	.233309	4.70	1.90	.249305
3.35	2.55	.2337407	4.71	1.89	.2446311
3.36	2.54	.2344036	4.72	1.89	.2479468
3.37	2.54	.2352463	4.73	1.89	.2512634
3.38	2.53	.2359651	4.74	1.88	.2483649
3.39	2.52	.2369184	4.75	1.88	.2498584

WUC30

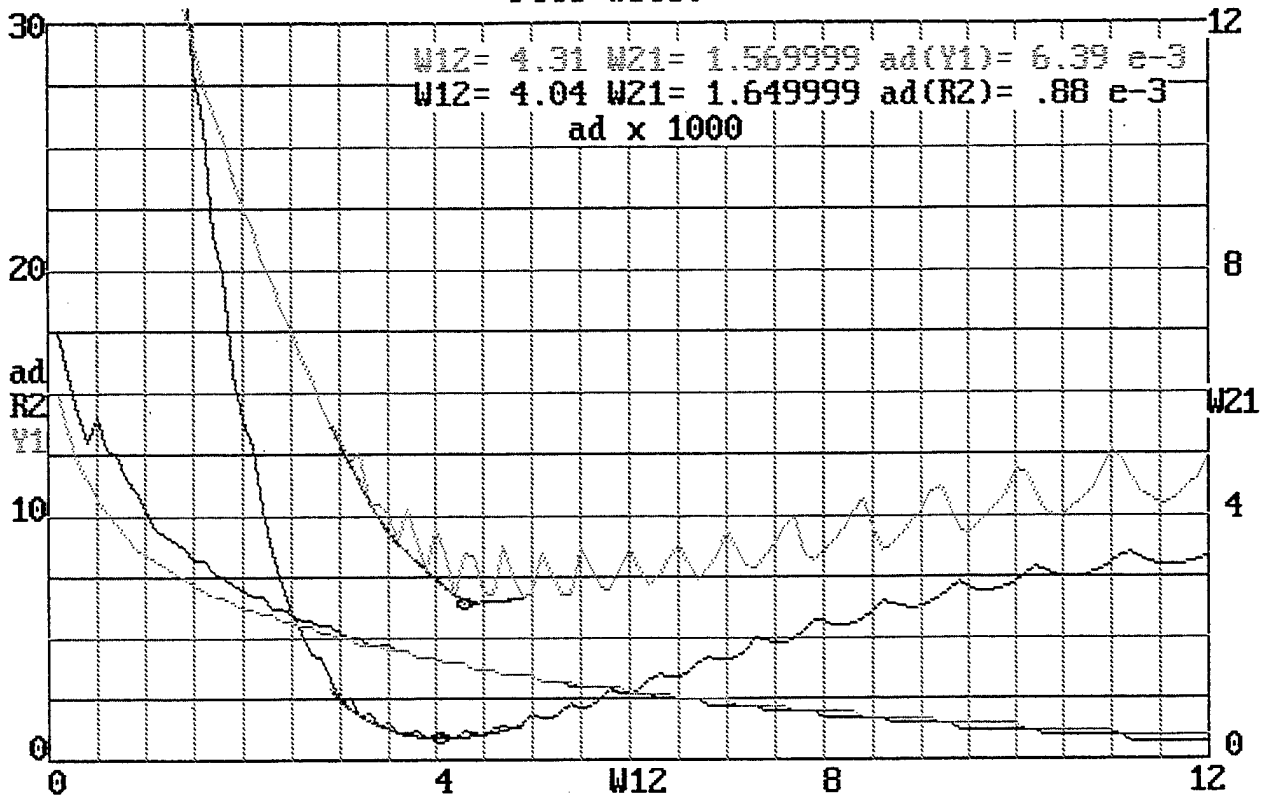
File:WUC40



W12	W21	100ad(R2)	W12	W21	100ad(Y1)
3.39	2.16	8.535345E-02	4.30	1.80	.4014688
3.40	2.15	8.488926E-02	4.31	1.80	.4006249
3.41	2.15	8.440382E-02	4.32	1.79	.4018809
3.42	2.14	8.404593E-02	4.33	1.79	.4010541
3.43	2.14	8.367943E-02	4.34	1.79	.4002214
3.44	2.13	8.343436E-02	4.35	1.78	.4015003
3.45	2.13	8.317742E-02	4.36	1.78	.400682
3.46	2.12	8.305066E-02	4.37	1.78	.3998578
3.47	2.12	8.289257E-02	4.38	1.77	.4011657
3.48	2.11	8.288993E-02	4.39	1.77	.4003585
3.49	2.11	8.281944E-02	4.40	1.77	.3996066
3.50	2.10	8.294708E-02	4.41	1.76	.400877
3.51	2.10	8.295485E-02	4.42	1.76	.4000783
3.52	2.09	.083219	4.43	1.76	.4005407
3.53	2.09	8.329572E-02	4.44	1.75	.400636
3.54	2.08	8.370291E-02	4.45	1.75	.3998476
3.55	2.08	8.383781E-02	4.46	1.74	.4012125
3.56	2.07	8.439537E-02	4.47	1.74	.4004359
3.57	2.07	8.457982E-02	4.48	1.74	.3996568
3.58	2.06	8.529452E-02	4.49	1.73	.4010499
3.59	2.06	8.551927E-02	4.50	1.73	.4002852

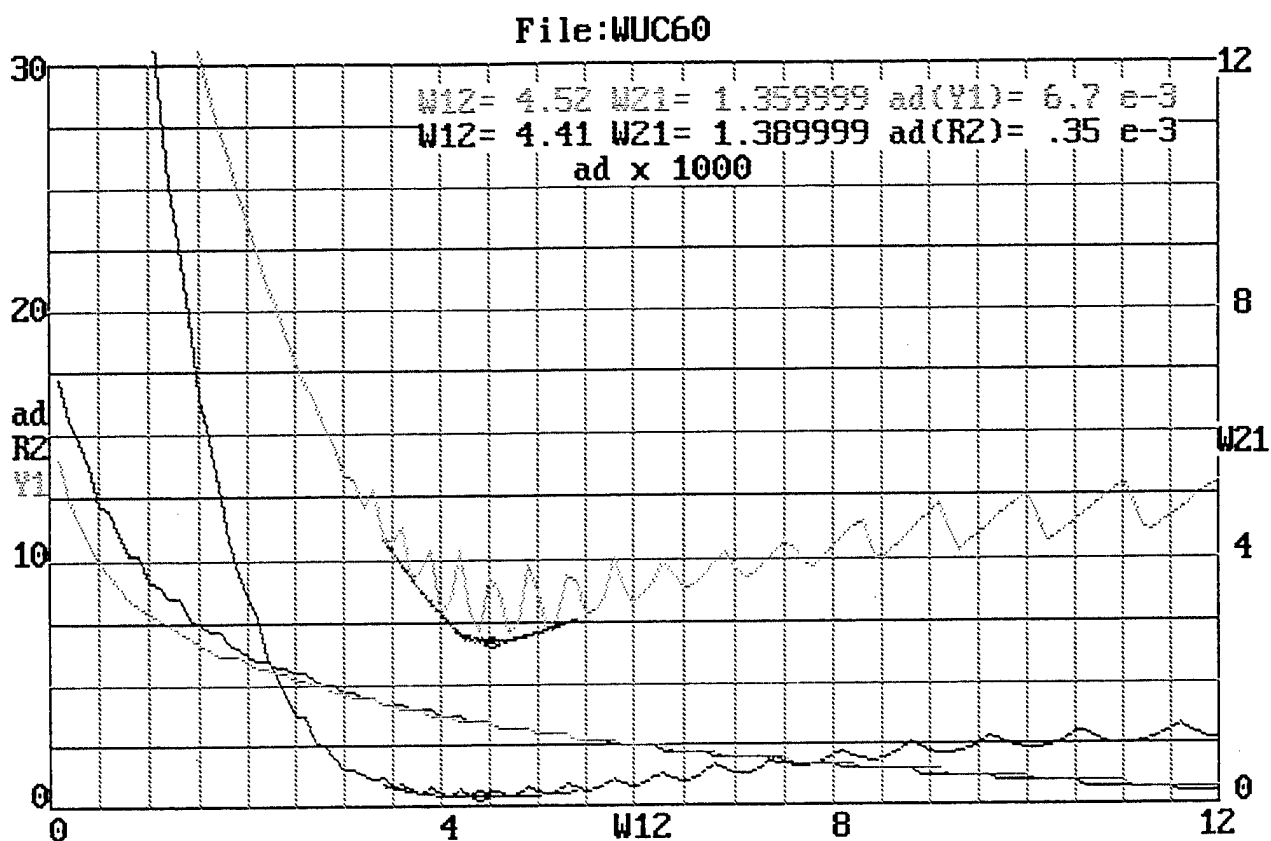
WUC40

File:WUC50



W12	W21	100ad(R2)	W12	W21	100ad(Y1)
3.94	1.69	8.960668E-02	4.21	1.60	.671414
3.95	1.68	8.909025E-02	4.22	1.60	.6725703
3.96	1.68	8.892195E-02	4.23	1.59	.6729846
3.97	1.67	8.896622E-02	4.24	1.59	.6608635
3.98	1.67	8.853859E-02	4.25	1.59	.6610338
3.99	1.67	8.852636E-02	4.26	1.59	.6704863
4.00	1.66	8.846792E-02	4.27	1.58	.6553322
4.01	1.66	8.818958E-02	4.28	1.58	.6492891
4.02	1.66	8.832041E-02	4.29	1.58	.6613548
4.03	1.65	8.817394E-02	4.30	1.57	.6550934
4.04	1.65	8.803184E-02	4.31	1.57	.6393545
4.05	1.65	8.829256E-02	4.32	1.57	.6526825
4.06	1.64	8.807249E-02	4.33	1.56	.6553028
4.07	1.64	8.805278E-02	4.34	1.56	.6426088
4.08	1.64	8.843167E-02	4.35	1.56	.6436605
4.09	1.63	8.815198E-02	4.36	1.55	.6576402
4.10	1.63	8.824312E-02	4.37	1.55	.6464635
4.11	1.62	8.860328E-02	4.38	1.55	.6404903
4.12	1.62	8.840241E-02	4.39	1.55	.6487536
4.13	1.62	8.859204E-02	4.40	1.54	.6506073
4.14	1.61	8.892394E-02	4.41	1.54	.6422494

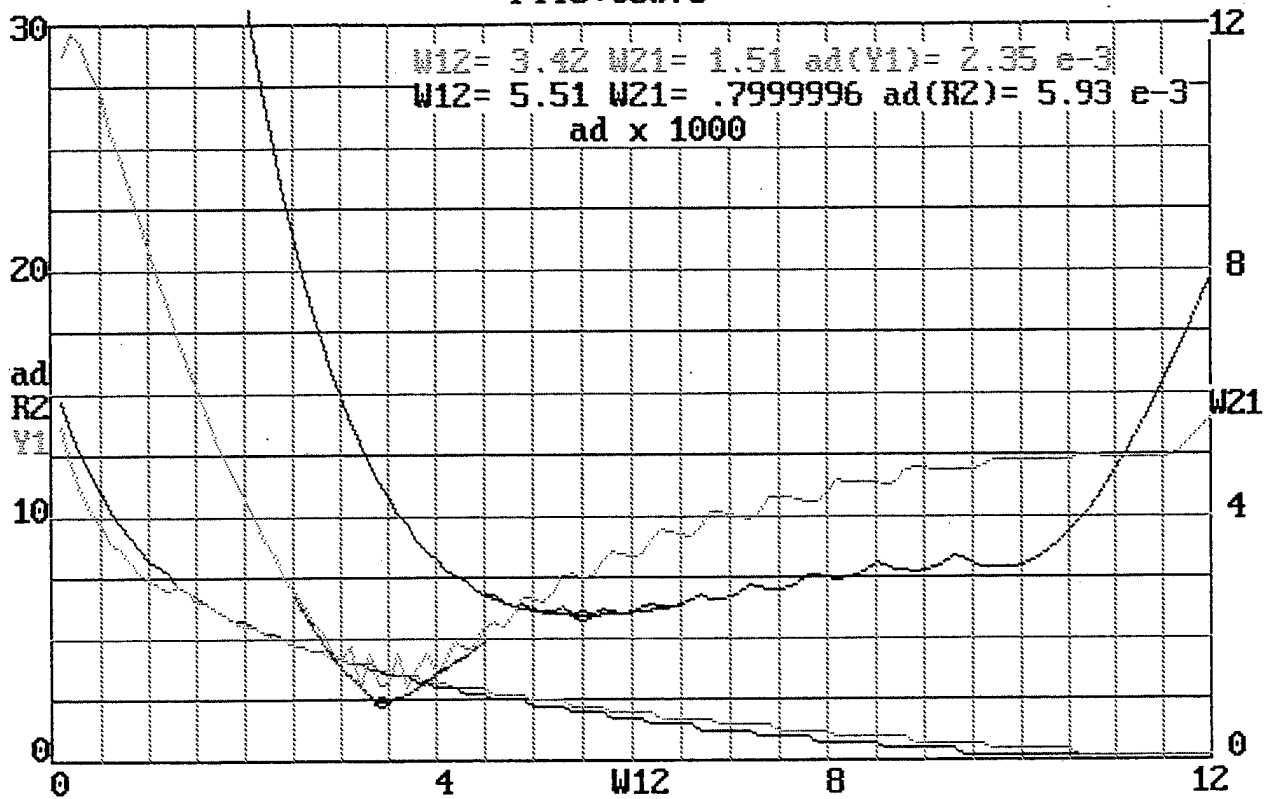
WUC50



W12	W21	100ad(R2)	W12	W21	100ad(Y1)
4.31	1.42	.0358893	4.42	1.38	.6868502
4.32	1.42	3.596817E-02	4.43	1.38	.6750336
4.33	1.41	3.598238E-02	4.44	1.38	.6707793
4.34	1.41	3.567746E-02	4.45	1.38	.681299
4.35	1.41	3.568306E-02	4.46	1.37	.6792307
4.36	1.40	3.594641E-02	4.47	1.37	.6747886
4.37	1.40	3.556438E-02	4.48	1.37	.6705786
4.38	1.40	3.548909E-02	4.49	1.37	.6811107
4.39	1.40	3.571818E-02	4.50	1.36	.6788974
4.40	1.39	3.555546E-02	4.51	1.36	.6747261
4.41	1.39	3.539211E-02	4.52	1.36	.6705562
4.42	1.39	3.552962E-02	4.53	1.36	.6803925
4.43	1.38	3.565711E-02	4.54	1.35	.6789625
4.44	1.38	3.539872E-02	4.55	1.35	.6748295
4.45	1.38	3.543793E-02	4.56	1.35	.6707048
4.46	1.38	3.577197E-02	4.57	1.35	.6791621
4.47	1.37	3.551559E-02	4.58	1.34	.679199
4.48	1.37	.0354496	4.59	1.34	.6751081
4.49	1.37	3.567549E-02	4.60	1.34	.6710231
4.50	1.36	3.575092E-02	4.61	1.34	.6774198
4.51	1.36	3.557278E-02	4.62	1.33	.6796042

WUC60

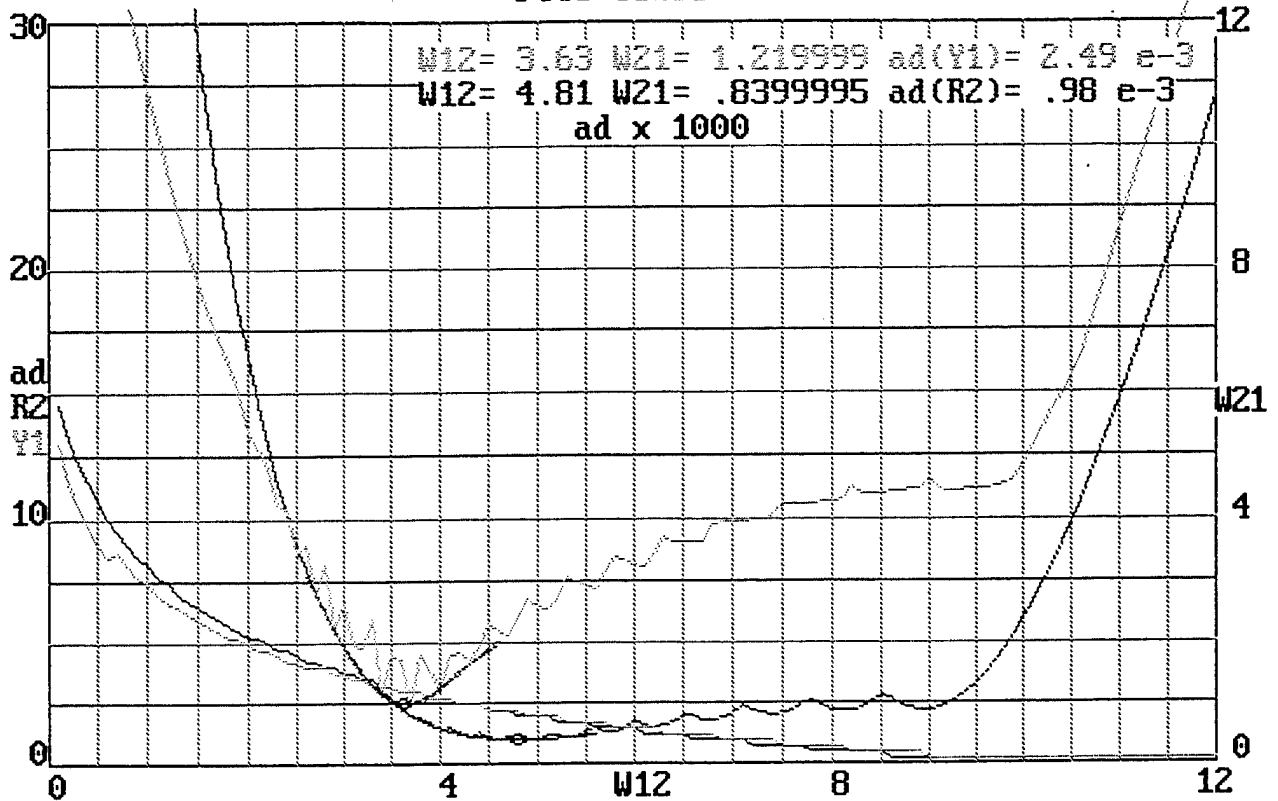
File:CUW78



W12	W21	100ad(R2)	W12	W21	100ad(Y1)
5.41	0.82	.594389	3.32	1.55	.2565742
5.42	0.82	.5941493	3.33	1.54	.2560794
5.43	0.82	.5940758	3.34	1.54	.2498739
5.44	0.82	.5941643	3.35	1.54	.2547218
5.45	0.81	.5939748	3.36	1.53	.2438963
5.46	0.81	.5937783	3.37	1.53	.2449778
5.47	0.81	.5937445	3.38	1.52	.2482017
5.48	0.81	.5938695	3.39	1.52	.2382166
5.49	0.80	.5937689	3.40	1.52	.241722
5.50	0.80	.5936057	3.41	1.51	.2405233
5.51	0.80	.593601	3.42	1.51	.2351086
5.52	0.80	.5937576	3.43	1.51	.2474414
5.53	0.79	.593762	3.44	1.50	.2392517
5.54	0.79	.5936245	3.45	1.50	.2356437
5.55	0.79	.5936463	3.46	1.49	.2501799
5.56	0.79	.593826	3.47	1.49	.240122
5.57	0.78	.5939478	3.48	1.49	.2397809
5.58	0.78	.5938306	3.49	1.48	.2512468
5.59	0.78	.59387	3.50	1.48	.241279
5.60	0.78	.5940638	3.51	1.48	.2441095
5.61	0.77	.5943223	3.52	1.47	.2525932

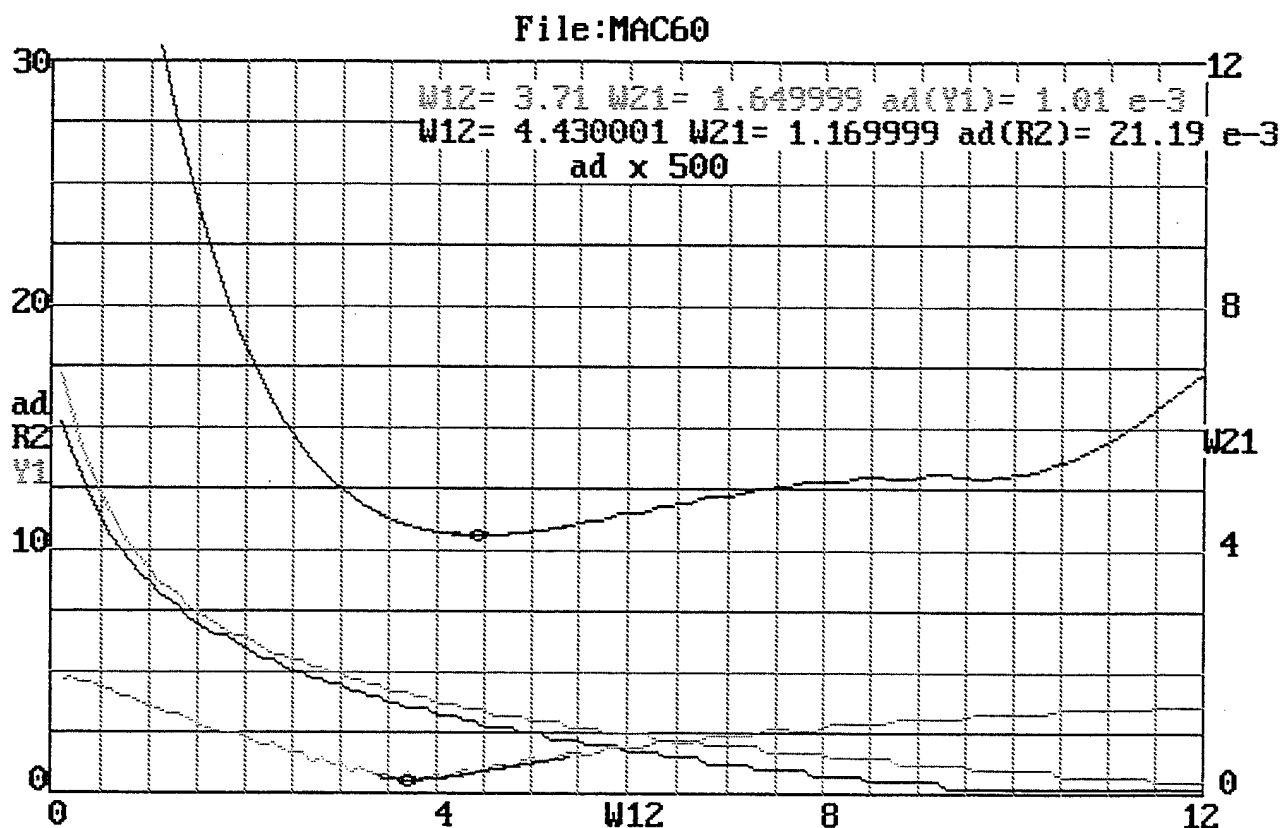
CUW78

File:CUW98



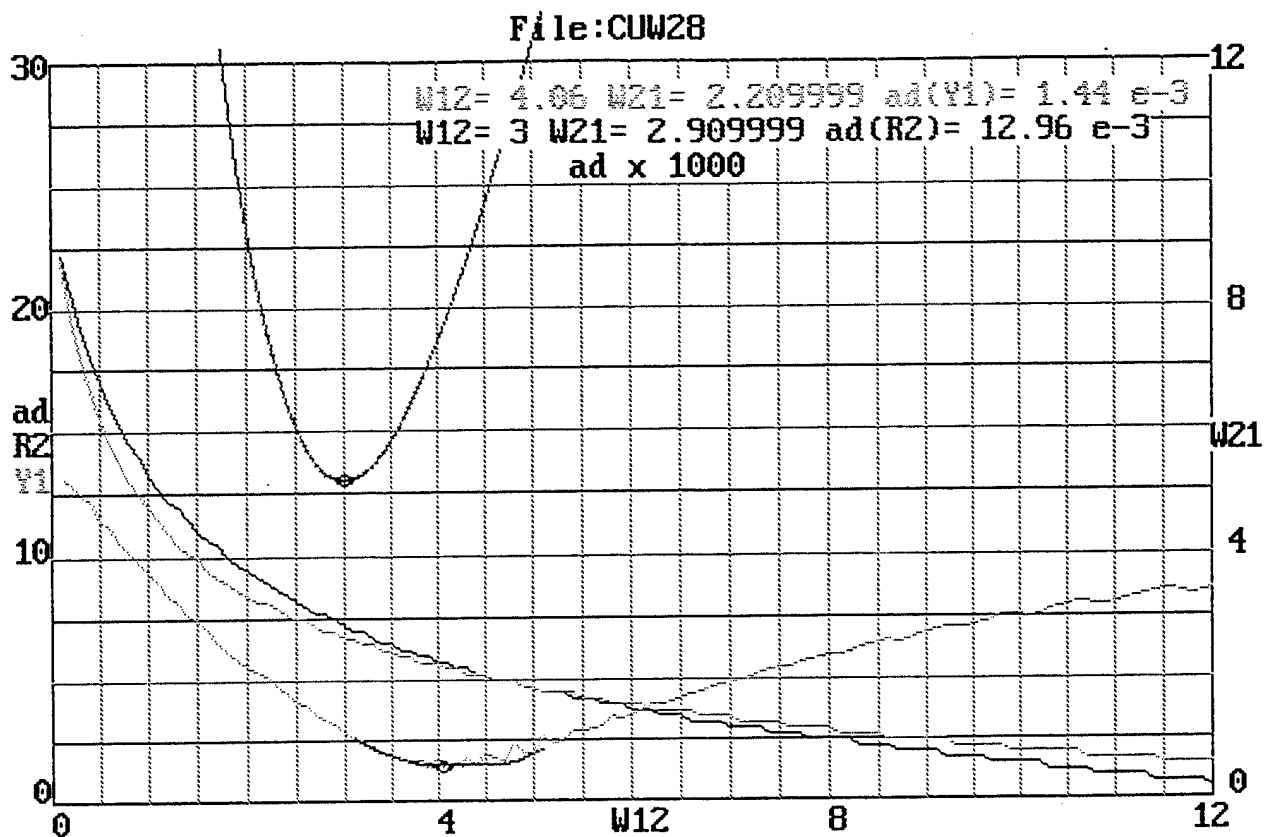
W12	W21	100ad(R2)	W12	W21	100ad(Y1)
4.71	0.87	9.879555E-02	3.53	1.26	.2581473
4.72	0.86	9.892102E-02	3.54	1.26	.2622809
4.73	0.86	9.859211E-02	3.55	1.25	.2575734
4.74	0.86	9.849288E-02	3.56	1.25	.2527054
4.75	0.86	9.862118E-02	3.57	1.24	.2570906
4.76	0.85	9.852106E-02	3.58	1.24	.2517155
4.77	0.85	.0983409	3.59	1.24	.2538754
4.78	0.85	9.838703E-02	3.60	1.23	.2513388
4.79	0.84	9.861297E-02	3.61	1.23	.2518454
4.80	0.84	9.834644E-02	3.62	1.23	.2549052
4.81	0.84	9.830372E-02	3.63	1.22	.2497452
4.82	0.84	9.848322E-02	3.64	1.22	.2527667
4.83	0.83	9.851427E-02	3.65	1.22	.2557997
4.84	0.83	.0983766	3.66	1.21	.2505647
4.85	0.83	9.846004E-02	3.67	1.21	.2535599
4.86	0.83	9.876018E-02	3.68	1.21	.2565605
4.87	0.82	9.861419E-02	3.69	1.20	.2512489
4.88	0.82	9.859392E-02	3.70	1.20	.2542159
4.89	0.82	9.879035E-02	3.71	1.20	.2571821
4.90	0.81	9.902432E-02	3.72	1.19	.2518071
4.91	0.81	9.889516E-02	3.73	1.19	.2547426

CUW98



W12	W21	100ad(R2)	W12	W21	100ad(Y1)
4.33	1.21	2.120962	3.61	1.69	.1097295
4.34	1.20	2.120678	3.62	1.69	.1133217
4.35	1.20	2.120446	3.63	1.68	.106389
4.36	1.20	2.120366	3.64	1.68	.1092215
4.37	1.19	2.120139	3.65	1.67	.1092321
4.38	1.19	2.119988	3.66	1.67	.1050638
4.39	1.19	2.119988	3.67	1.67	.108601
4.40	1.18	2.119817	3.68	1.66	.1051525
4.41	1.18	2.119747	3.69	1.66	.1043651
4.42	1.18	2.119824	3.70	1.65	.1082434
4.43	1.17	2.119713	3.71	1.65	.101263
4.44	1.17	2.119715	3.72	1.65	.1057055
4.45	1.17	2.119863	3.73	1.64	.1044956
4.46	1.16	2.119819	3.74	1.64	.1018941
4.47	1.16	2.11989	3.75	1.63	.1078381
4.48	1.16	2.120105	3.76	1.63	.104128
4.49	1.15	2.120128	3.77	1.63	.1057386
4.50	1.15	2.120266	3.78	1.62	.1080129
4.51	1.15	2.120542	3.79	1.62	.1054956
4.52	1.14	2.120633	3.80	1.62	.1093633
4.53	1.14	2.120828	3.81	1.61	.1094255

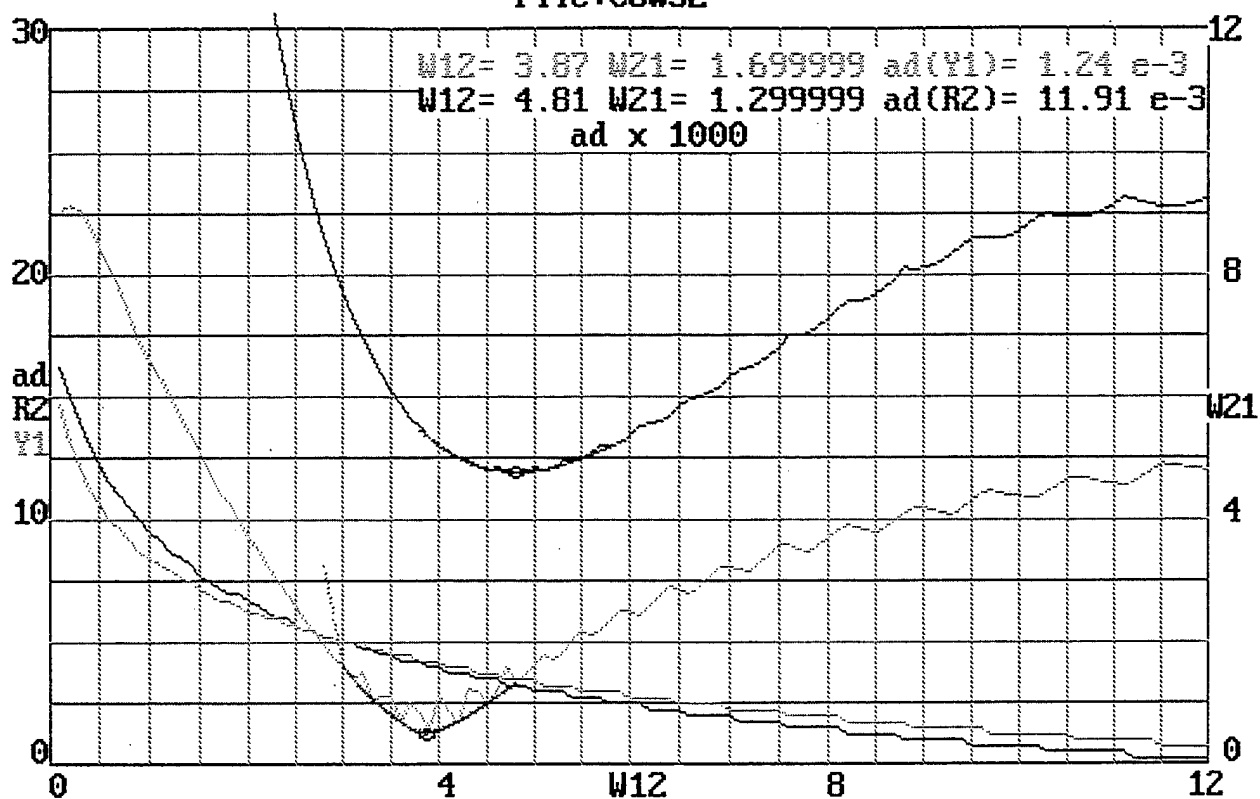
MAC60



W12	W21	100ad(R2)	W12	W21	100ad(Y1)
2.90	2.98	1.304294	3.96	2.25	.1448823
2.91	2.98	1.302871	3.97	2.25	.146738
2.92	2.97	1.301517	3.98	2.24	.1452784
2.93	2.96	1.30037	3.99	2.24	.1456976
2.94	2.95	1.299427	4.00	2.24	.1475427
2.95	2.95	1.298593	4.01	2.23	.1446399
2.96	2.94	1.297883	4.02	2.23	.1464778
2.97	2.93	1.297375	4.03	2.22	.1464605
2.98	2.93	1.297062	4.04	2.22	.1453936
2.99	2.92	1.296783	4.05	2.22	.1472168
3.00	2.91	1.296703	4.06	2.21	.1442949
3.01	2.90	1.29682	4.07	2.21	.1461102
3.02	2.90	1.297028	4.08	2.21	.1479235
3.03	2.89	1.297368	4.09	2.20	.1449857
3.04	2.88	1.297906	4.10	2.20	.146791
3.05	2.88	1.298583	4.11	2.19	.1461771
3.06	2.87	1.299331	4.12	2.19	.14564
3.07	2.86	1.300282	4.13	2.19	.1474354
3.08	2.86	1.301408	4.14	2.18	.1444764
3.09	2.85	1.302556	4.15	2.18	.1462592
3.10	2.84	1.303907	4.16	2.18	.1480401

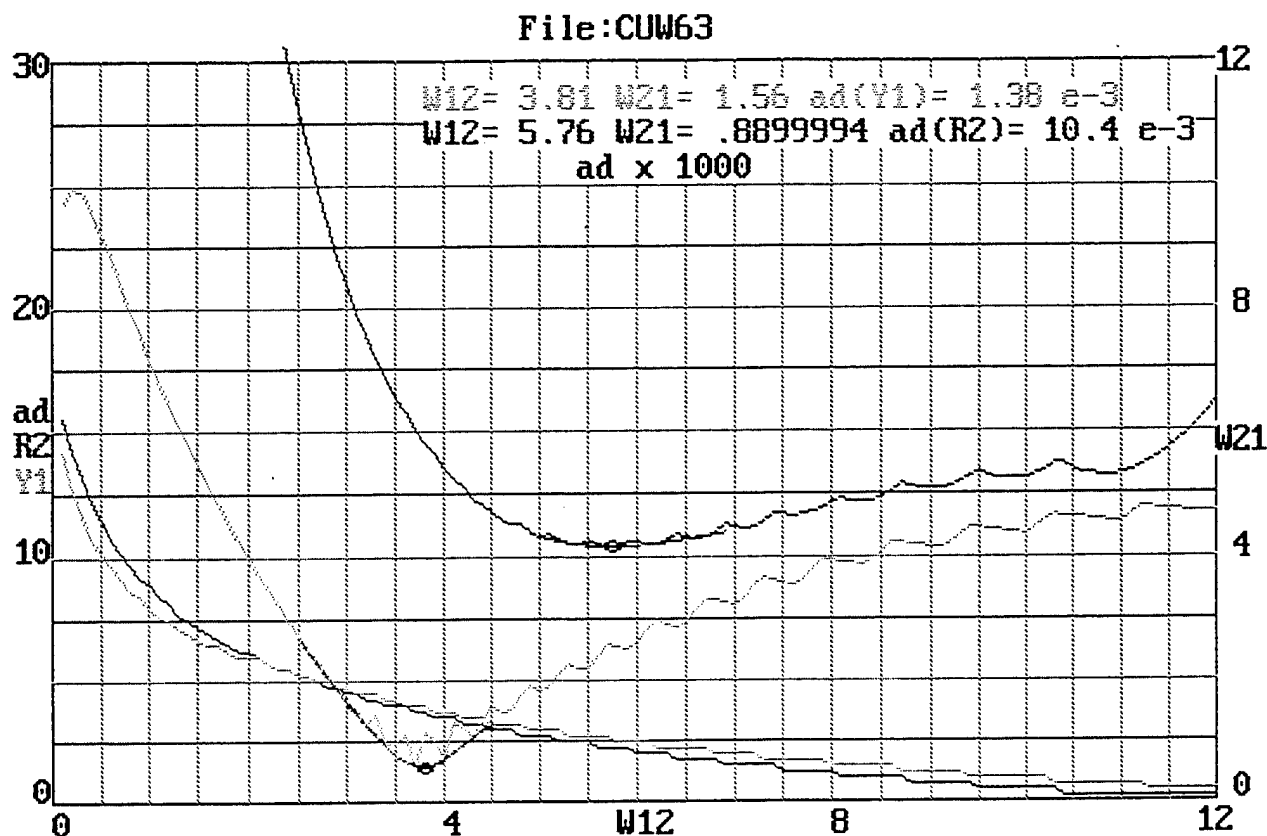
CUW28

File:CUW52



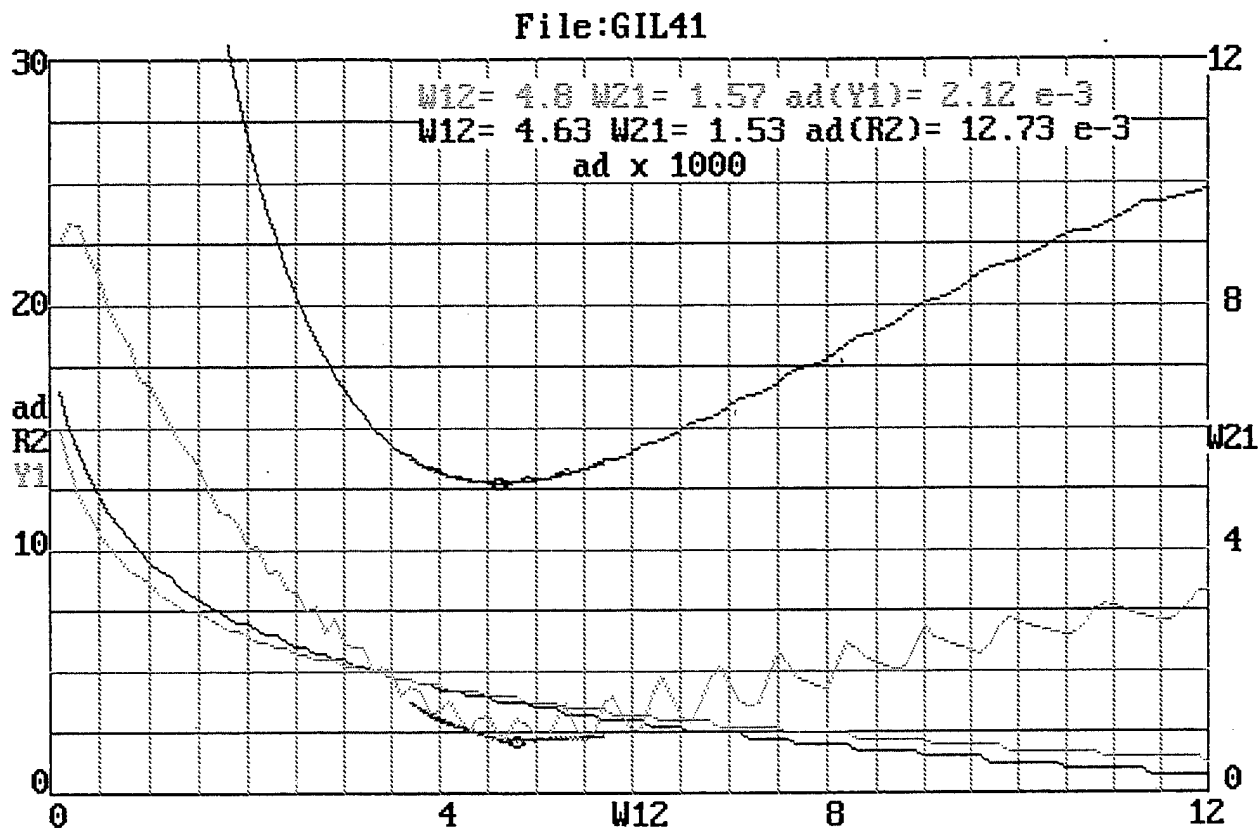
W12	W21	100ad(R2)	W12	W21	100ad(Y1)
4.71	1.33	1.192146	3.77	1.73	.132274
4.72	1.33	1.191953	3.78	1.73	.1265651
4.73	1.32	1.191902	3.79	1.73	.1352626
4.74	1.32	1.191553	3.80	1.72	.1282942
4.75	1.32	1.19141	3.81	1.72	.1254493
4.76	1.32	1.191473	3.82	1.72	.134781
4.77	1.31	1.191223	3.83	1.71	.1286405
4.78	1.31	1.191124	3.84	1.71	.1247907
4.79	1.31	1.19123	3.85	1.71	.1340562
4.80	1.30	1.191149	3.86	1.70	.1294237
4.81	1.30	1.191092	3.87	1.70	.1243043
4.82	1.30	1.191234	3.88	1.70	.1330876
4.83	1.29	1.191334	3.89	1.69	.1305264
4.84	1.29	1.191309	3.90	1.69	.1271182
4.85	1.29	1.191485	3.91	1.69	.1318795
4.86	1.28	1.19177	3.92	1.68	.1330614
4.87	1.28	1.191774	3.93	1.68	.1300132
4.88	1.28	1.191976	3.94	1.68	.130434
4.89	1.28	1.192373	3.95	1.67	.1360083
4.90	1.27	1.192486	3.96	1.67	.1329851
4.91	1.27	1.192709	3.97	1.67	.130378

CUW52



W12	W21	100ad(R2)	W12	W21	100ad(Y1)
5.66	0.91	1.040981	3.71	1.60	.1498199
5.67	0.91	1.040713	3.72	1.59	.1484352
5.68	0.91	1.040592	3.73	1.59	.1466584
5.69	0.91	1.040618	3.74	1.59	.1491982
5.70	0.90	1.040721	3.75	1.58	.1435947
5.71	0.90	1.040483	3.76	1.58	.1439655
5.72	0.90	1.04039	3.77	1.58	.1495802
5.73	0.90	1.040441	3.78	1.57	.1388133
5.74	0.90	1.040635	3.79	1.57	.1431382
5.75	0.89	1.040451	3.80	1.56	.1493114
5.76	0.89	1.040383	3.81	1.56	.1385653
5.77	0.89	1.040453	3.82	1.56	.1421893
5.78	0.89	1.040664	3.83	1.55	.1497275
5.79	0.88	1.040623	3.84	1.55	.1415813
5.80	0.88	1.04057	3.85	1.55	.1416475
5.81	0.88	1.040655	3.86	1.54	.1528955
5.82	0.88	1.040881	3.87	1.54	.1452619
5.83	0.87	1.040987	3.88	1.54	.1443923
5.84	0.87	1.040944	3.89	1.53	.1565749
5.85	0.87	1.041038	3.90	1.53	.152542
5.86	0.87	1.041274	3.91	1.53	.1485223

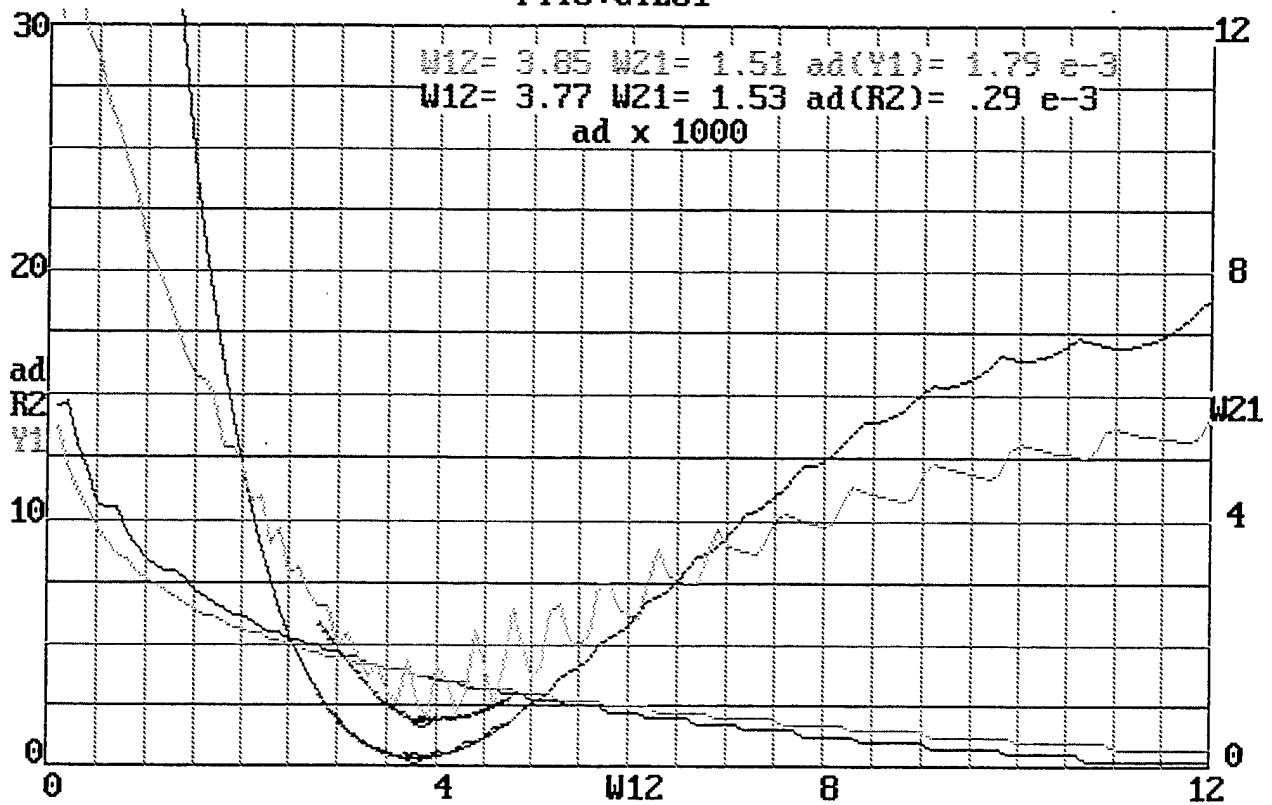
CUW63



W12	W21	100ad(R2)	W12	W21	100ad(Y1)
4.53	1.56	1.274693	4.70	1.59	.2159394
4.54	1.56	1.274488	4.71	1.59	.2128888
4.55	1.56	1.274447	4.72	1.59	.2135257
4.56	1.55	1.274267	4.73	1.58	.2197915
4.57	1.55	1.274082	4.74	1.58	.2167737
4.58	1.55	1.274061	4.75	1.58	.2137577
4.59	1.54	1.274024	4.76	1.58	.2129513
4.60	1.54	1.273859	4.77	1.57	.2207288
4.61	1.54	1.273853	4.78	1.57	.2177457
4.62	1.53	1.273965	4.79	1.57	.2147615
4.63	1.53	1.273811	4.80	1.57	.2121064
4.64	1.53	1.273818	4.81	1.57	.2200577
4.65	1.53	1.273985	4.82	1.56	.2188496
4.66	1.52	1.273943	4.83	1.56	.2158995
4.67	1.52	1.273956	4.84	1.56	.2129479
4.68	1.52	1.274128	4.85	1.56	.2188886
4.69	1.51	1.274254	4.86	1.55	.2200812
4.70	1.51	1.27427	4.87	1.55	.2171636
4.71	1.51	1.274444	4.88	1.55	.2142436
4.72	1.50	1.274739	4.89	1.55	.217453
4.73	1.50	1.274755	4.90	1.54	.2214405

GIL41

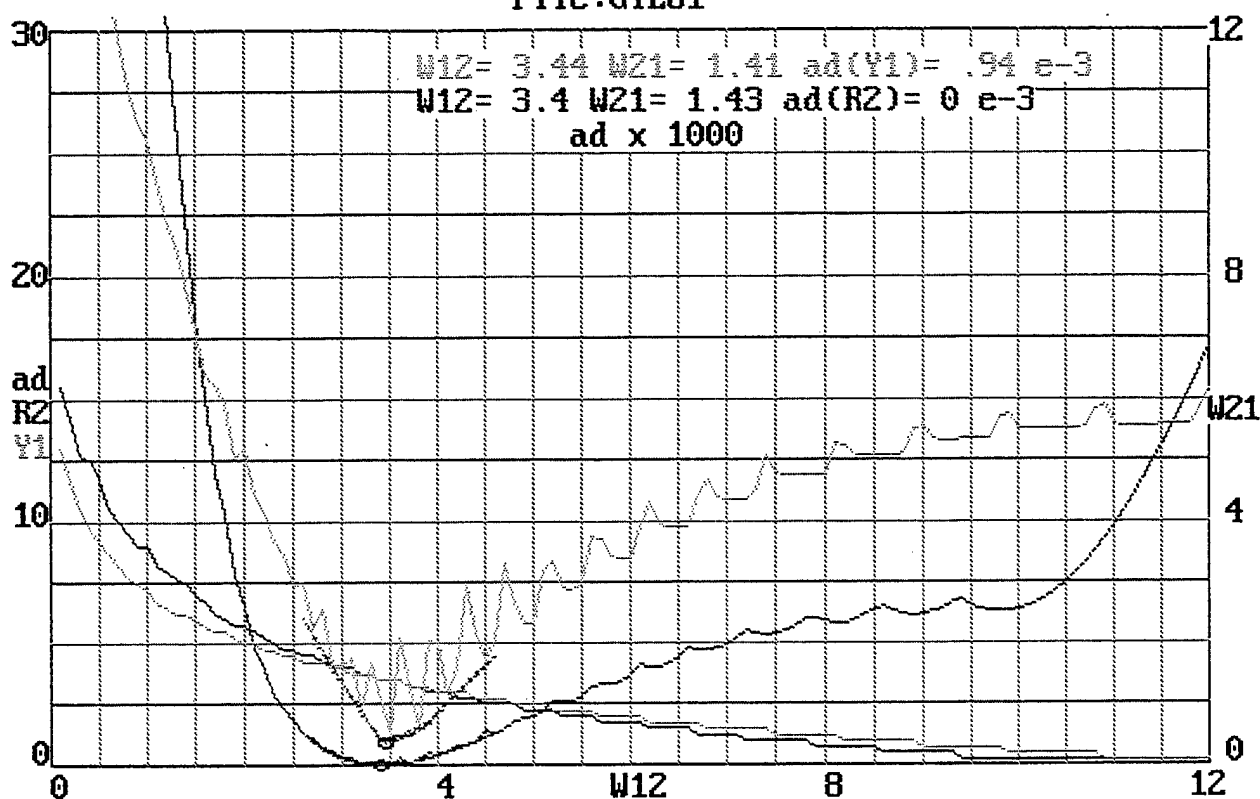
File:GIL61



W12	W21	100ad(R2)	W12	W21	100ad(Y1)
3.67	1.57	3.208555E-02	3.75	1.54	.1795215
3.68	1.57	3.183546E-02	3.76	1.54	.1908494
3.69	1.56	3.125597E-02	3.77	1.53	.1898532
3.70	1.56	3.093016E-02	3.78	1.53	.1793727
3.71	1.55	3.070664E-02	3.79	1.53	.186949
3.72	1.55	3.030019E-02	3.80	1.52	.1898182
3.73	1.55	3.020687E-02	3.81	1.52	.1827282
3.74	1.54	2.995067E-02	3.82	1.52	.1826922
3.75	1.54	2.977014E-02	3.83	1.51	.1933006
3.76	1.53	2.988445E-02	3.84	1.51	.1862819
3.77	1.53	.029613	3.85	1.51	.1792682
3.78	1.53	2.964803E-02	3.86	1.51	.1920159
3.79	1.52	2.974128E-02	3.87	1.50	.1900338
3.80	1.52	2.967837E-02	3.88	1.50	.1830928
3.81	1.52	2.991732E-02	3.89	1.50	.1869688
3.82	1.51	2.999449E-02	3.90	1.49	.1939791
3.83	1.51	3.012951E-02	3.91	1.49	.1871062
3.84	1.51	3.056186E-02	3.92	1.49	.1815863
3.85	1.50	3.062953E-02	3.93	1.49	.1953018
3.86	1.50	3.095243E-02	3.94	1.48	.1913118
3.87	1.49	3.142135E-02	3.95	1.48	.1845141

GIL61

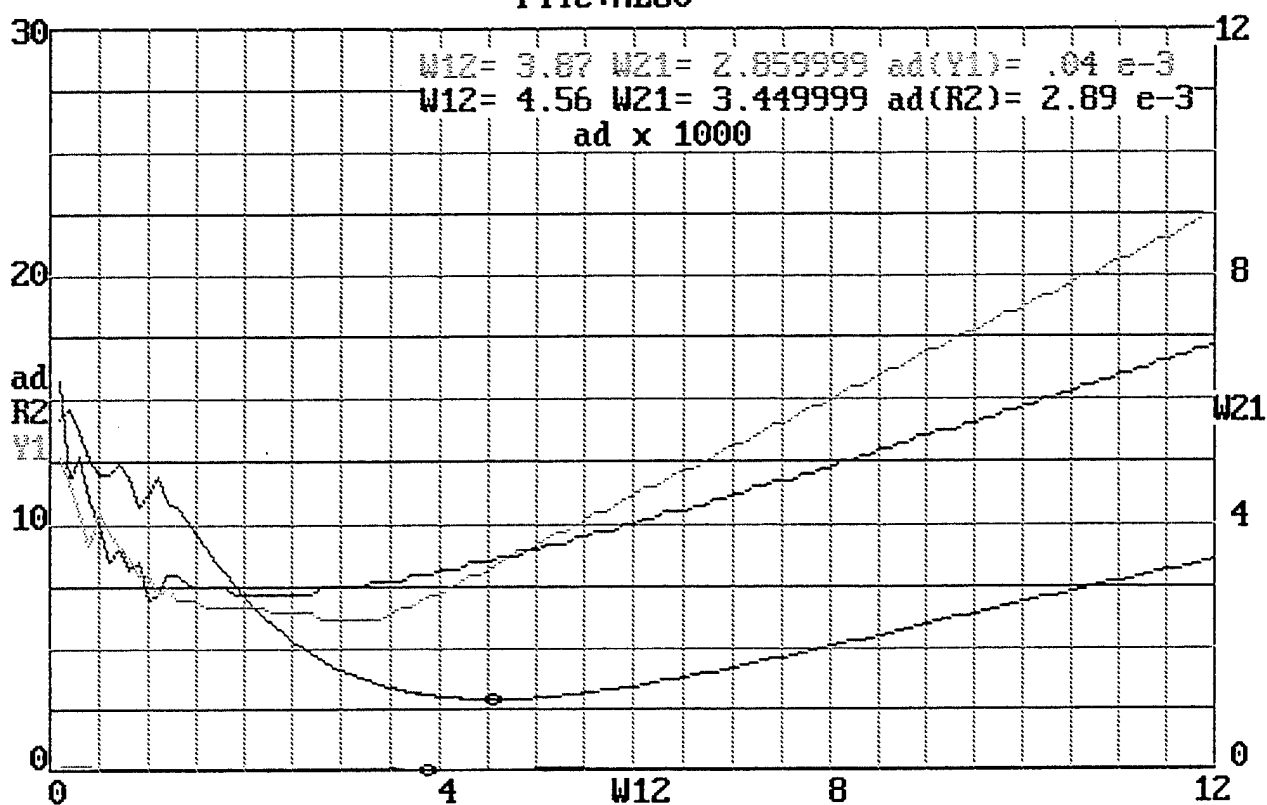
File:GIL81



W12	W21	100ad(R2)	W12	W21	100ad(Y1)
3.30	1.47	2.017842E-03	3.34	1.45	.1408255
3.31	1.47	1.702571E-03	3.35	1.44	.1282427
3.32	1.46	1.609723E-03	3.36	1.44	.1219624
3.33	1.46	1.235529E-03	3.37	1.44	.12449
3.34	1.46	1.245086E-03	3.38	1.43	.1120293
3.35	1.45	9.366014E-04	3.39	1.43	.1069069
3.36	1.45	8.778582E-04	3.40	1.43	.1139233
3.37	1.44	8.086163E-04	3.41	1.42	.1013359
3.38	1.44	6.755427E-04	3.42	1.42	9.852111E-02
3.39	1.43	8.549457E-04	3.43	1.42	.1126063
3.40	1.43	6.416621E-04	3.44	1.41	9.456039E-02
3.41	1.43	7.992257E-04	3.45	1.41	9.710491E-02
3.42	1.42	7.797663E-04	3.46	1.40	.1095051
3.43	1.42	8.484106E-04	3.47	1.40	9.534001E-02
3.44	1.41	1.093965E-03	3.48	1.40	9.894311E-02
3.45	1.41	1.067999E-03	3.49	1.39	.1103336
3.46	1.41	1.403468E-03	3.50	1.39	.1001272
3.47	1.40	1.462156E-03	3.51	1.39	.10032
3.48	1.40	1.694747E-03	3.52	1.38	.1153329
3.49	1.39	2.035808E-03	3.53	1.38	.1052344
3.50	1.39	2.160008E-03	3.54	1.38	.1012409

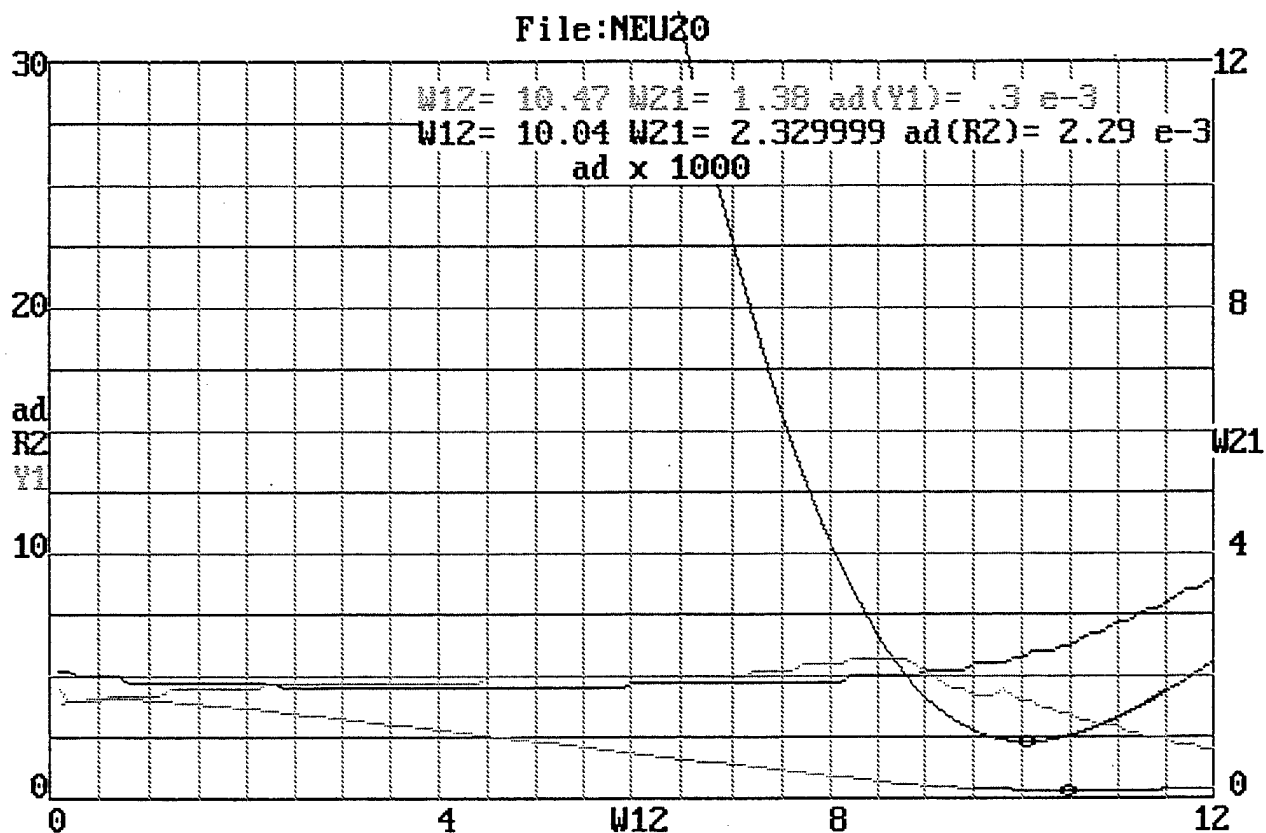
GIL81

File:NEU0



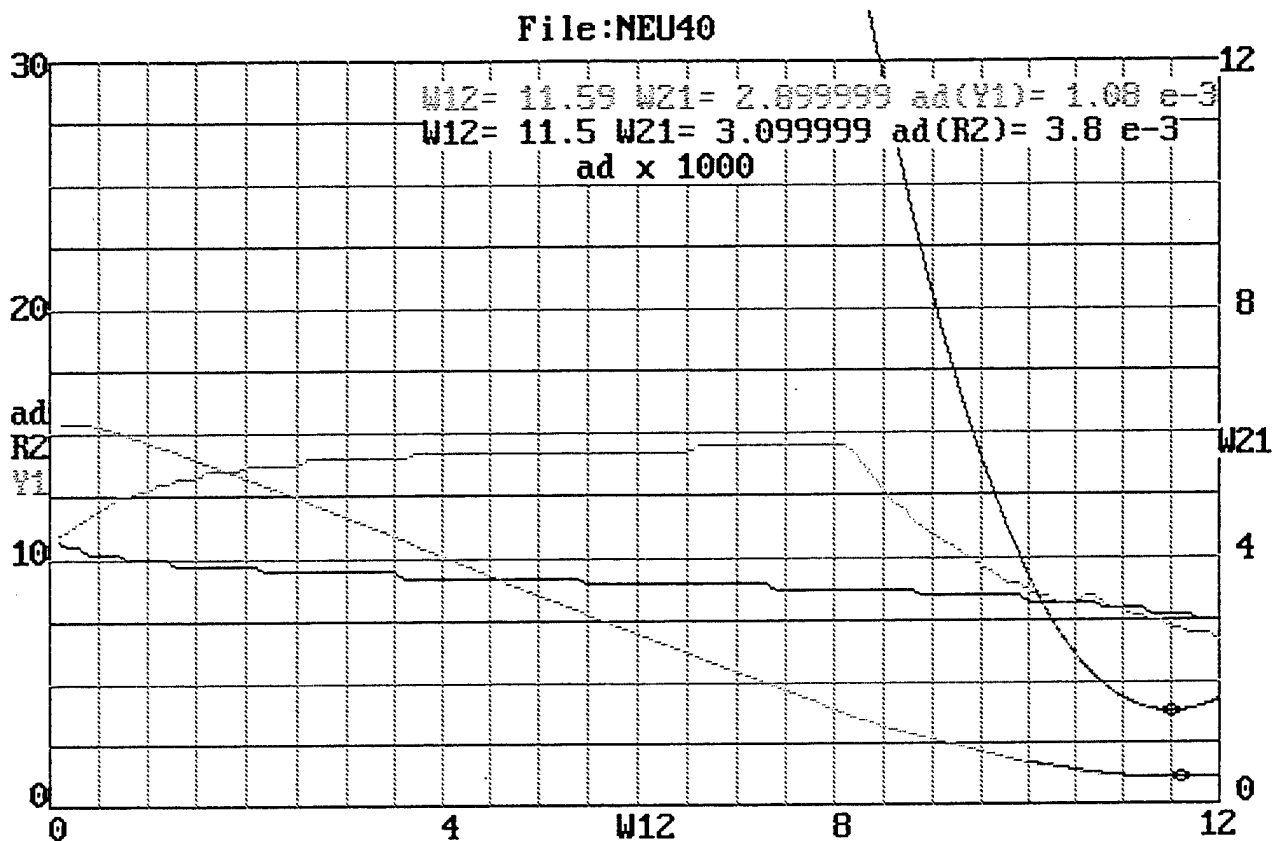
W12	W21	100ad(R2)	W12	W21	100ad(Y1)
4.46	3.42	.2902679	3.77	2.78	4.735589E-03
4.47	3.42	.2901847	3.78	2.79	4.715473E-03
4.48	3.42	.2901207	3.79	2.80	4.707277E-03
4.49	3.43	.2900675	3.80	2.81	4.696846E-03
4.50	3.43	.2900088	3.81	2.81	4.687161E-03
4.51	3.43	.2899971	3.82	2.82	4.667044E-03
4.52	3.44	.2899344	3.83	2.83	4.657358E-03
4.53	3.44	.289902	3.84	2.84	4.650653E-03
4.54	3.44	.28989	3.85	2.84	4.638732E-03
4.55	3.45	.2898679	3.86	2.85	4.620105E-03
4.56	3.45	.2898599	3.87	2.86	4.61042E-03
4.57	3.46	.2898719	3.88	2.86	4.61191E-03
4.58	3.46	.2898691	3.89	2.87	4.61042E-03
4.59	3.46	.2898857	3.90	2.88	4.611165E-03
4.60	3.47	.2899097	3.91	2.88	4.614145E-03
4.61	3.47	.2899335	3.92	2.89	4.61787E-03
4.62	3.47	.2899741	3.93	2.90	4.61936E-03
4.63	3.48	.2900139	3.94	2.91	4.61936E-03
4.64	3.48	.29006	3.95	2.91	4.626066E-03
4.65	3.48	.2901257	3.96	2.92	4.629791E-03
4.66	3.49	.2901803	3.97	2.93	4.632771E-03

NEU0



W12	W21	100ad(R2)	W12	W21	100ad(Y1)
9.94	2.29	.2312872	10.37	1.43	3.087033E-02
9.95	2.29	.2310045	10.38	1.42	3.085462E-02
9.96	2.30	.2307495	10.39	1.42	3.074353E-02
9.97	2.30	.2305207	10.40	1.41	3.071211E-02
9.98	2.30	.2303288	10.41	1.41	.0306124
9.99	2.31	.2301546	10.42	1.40	3.057664E-02
10.00	2.31	.2300166	10.43	1.40	3.048344E-02
10.01	2.32	.2299086	10.44	1.39	3.044389E-02
10.02	2.32	.2298246	10.45	1.39	3.035231E-02
10.03	2.32	.2297744	10.46	1.38	3.031601E-02
10.04	2.33	.2297457	10.47	1.38	3.024069E-02
10.05	2.33	.229749	10.48	1.37	3.029596E-02
10.06	2.34	.2297837	10.49	1.37	3.024882E-02
10.07	2.34	.2298392	10.50	1.36	3.031438E-02
10.08	2.34	.2299288	10.51	1.36	3.025532E-02
10.09	2.35	.2300405	10.52	1.36	3.033497E-02
10.10	2.35	.2301816	10.53	1.35	3.025965E-02
10.11	2.36	.2303527	10.54	1.35	3.034093E-02
10.12	2.36	.2305438	10.55	1.34	3.027537E-02
10.13	2.36	.2307708	10.56	1.34	3.034093E-02
10.14	2.37	.2310145	10.57	1.33	3.030463E-02

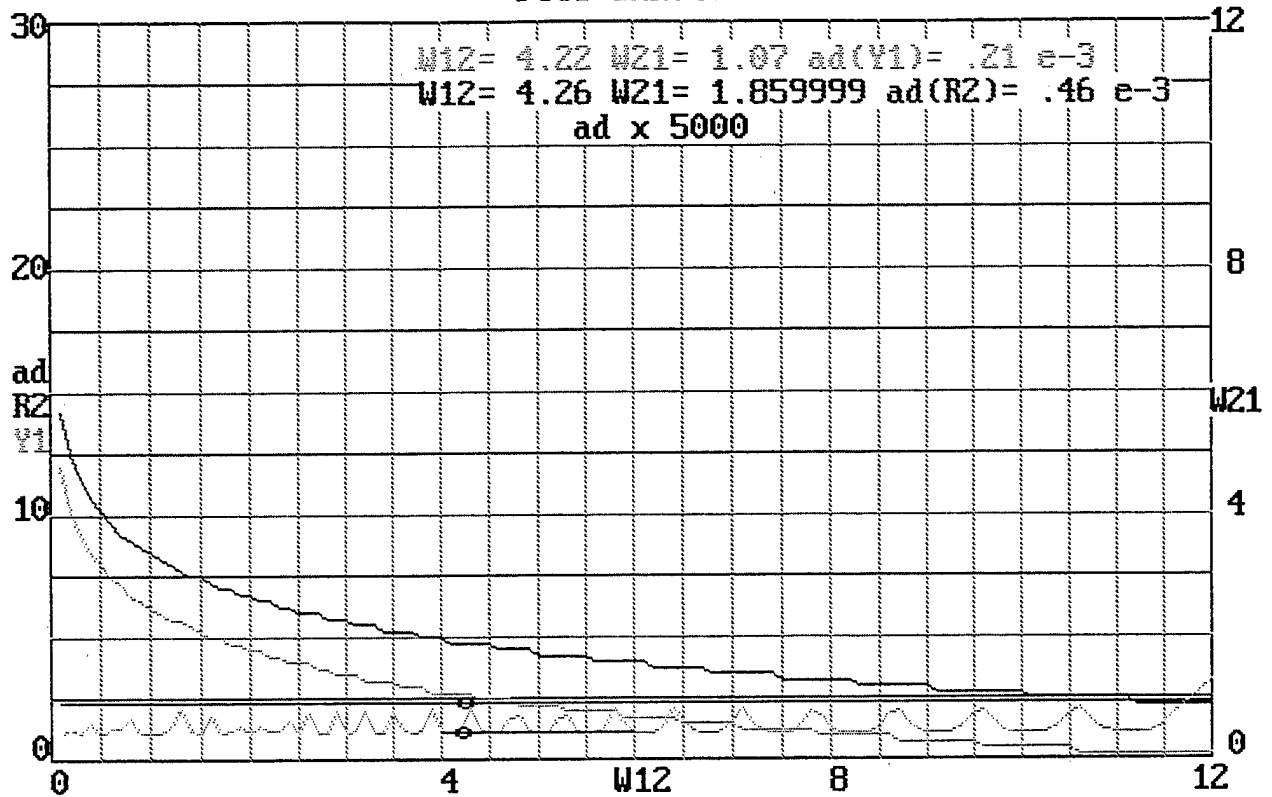
NEU20



W12	W21	100ad(R2)	W12	W21	100ad(Y1)
11.40	3.13	.3824832	11.49	2.95	.1085336
11.41	3.12	.3820807	11.50	2.94	.1086031
11.42	3.12	.3817171	11.51	2.94	.1085167
11.43	3.12	.3813996	11.52	2.93	.1086066
11.44	3.12	.3811272	11.53	2.93	.1084949
11.45	3.12	.3808994	11.54	2.92	.1086161
11.46	3.11	.3807057	11.55	2.92	.1084695
11.47	3.11	.3805554	11.56	2.91	.108631
11.48	3.11	.3804497	11.57	2.91	.1084432
11.49	3.11	.3803912	11.58	2.90	.1086483
11.50	3.10	.380369	11.59	2.90	.1084099
11.51	3.10	.3803832	11.60	2.89	.1086727
11.52	3.10	.3804426	11.61	2.89	.1084283
11.53	3.10	.3805489	11.62	2.88	.1086975
11.54	3.09	.3806962	11.63	2.88	.1084556
11.55	3.09	.3808758	11.64	2.88	.1086851
11.56	3.09	.3810997	11.65	2.87	.1084874
11.57	3.09	.3813679	11.66	2.87	.1086424
11.58	3.09	.3816786	11.67	2.86	.1085232
11.59	3.08	.3820271	11.68	2.86	.1085932
11.60	3.08	.3824105	11.69	2.85	.1085659

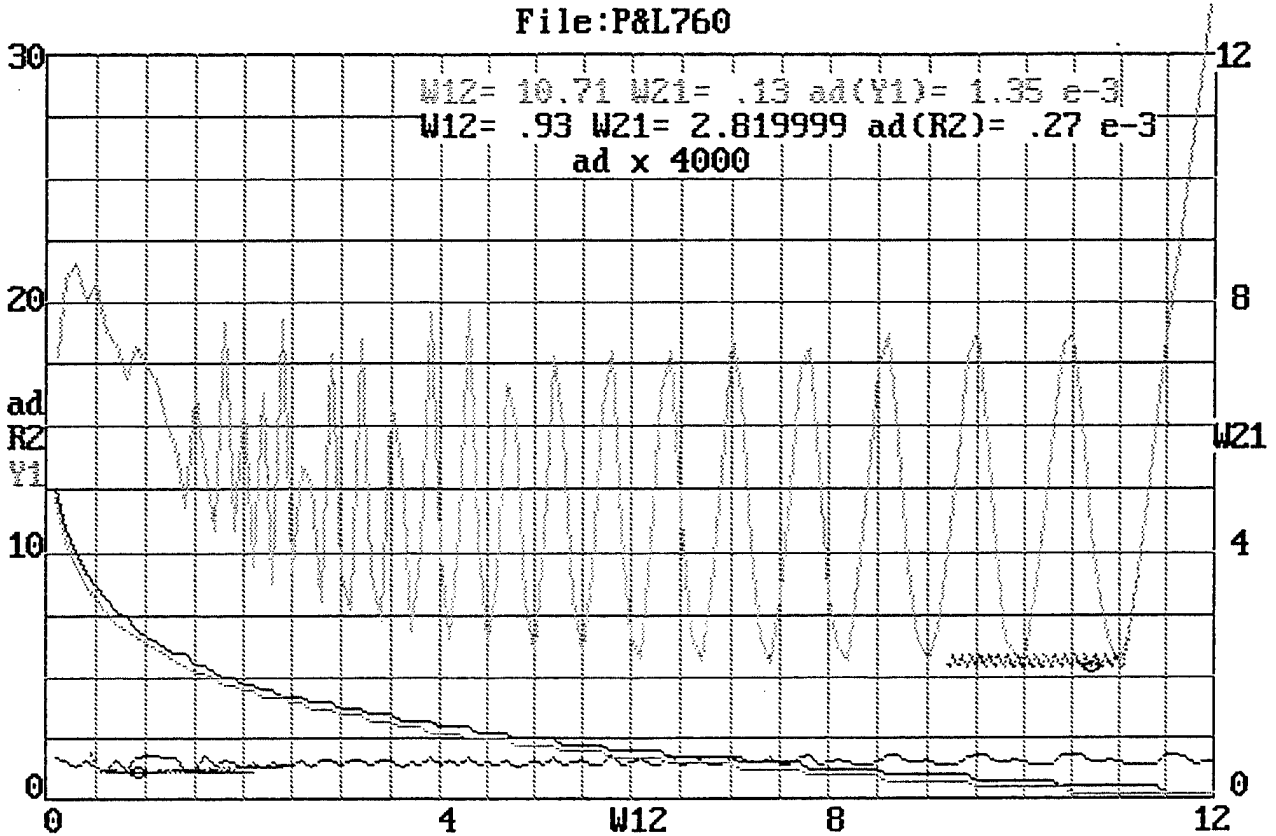
NEU40

File:SAK760



W12	W21	100ad(R2)	W12	W21	100ad(Y1)
4.16	1.89	.0462721	4.12	1.09	2.126284E-02
4.17	1.89	4.628577E-02	4.13	1.09	2.120759E-02
4.18	1.88	4.624253E-02	4.14	1.08	2.138186E-02
4.19	1.88	.0462563	4.15	1.08	2.132678E-02
4.20	1.88	4.626983E-02	4.16	1.08	2.127181E-02
4.21	1.88	4.628349E-02	4.17	1.08	2.121714E-02
4.22	1.87	4.624022E-02	4.18	1.07	2.139201E-02
4.23	1.87	4.625384E-02	4.19	1.07	2.133735E-02
4.24	1.87	4.626732E-02	4.20	1.07	2.128284E-02
4.25	1.87	4.628077E-02	4.21	1.07	2.122856E-02
4.26	1.86	4.623747E-02	4.22	1.07	2.117473E-02
4.27	1.86	4.625091E-02	4.23	1.06	2.134977E-02
4.28	1.86	4.626431E-02	4.24	1.06	2.129586E-02
4.29	1.86	4.627761E-02	4.25	1.06	2.124211E-02
4.30	1.86	4.629092E-02	4.26	1.06	2.118866E-02
4.31	1.85	4.624713E-02	4.27	1.05	2.136438E-02
4.32	1.85	4.626042E-02	4.28	1.05	2.131097E-02
4.33	1.85	4.627364E-02	4.29	1.05	2.125767E-02
4.34	1.85	4.628682E-02	4.30	1.05	2.120473E-02
4.35	1.84	4.624303E-02	4.31	1.04	2.138098E-02
4.36	1.84	.0462563	4.32	1.04	2.132798E-02

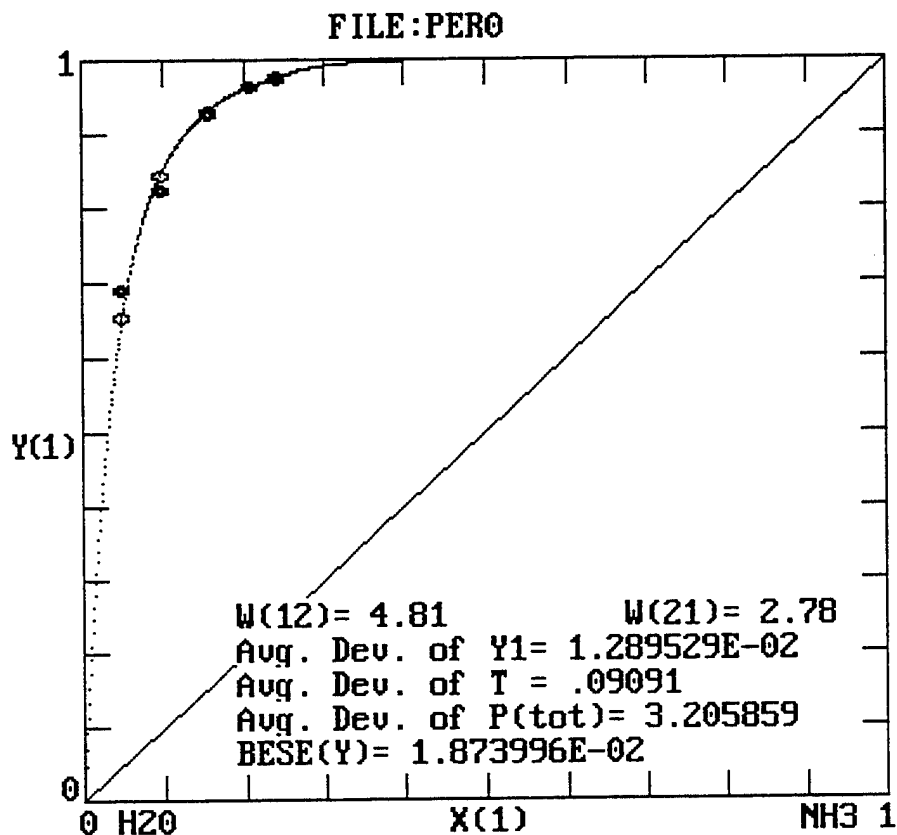
SAK760



W12	W21	100ad(R2)	W12	W21	100ad(Y1)
0.83	2.94	2.797129E-02	10.61	0.14	.1380278
0.84	2.93	2.816331E-02	10.62	0.14	.1434104
0.85	2.92	.0283574	10.63	0.13	.1473185
0.86	2.91	2.855177E-02	10.64	0.13	.1455309
0.87	2.89	2.784919E-02	10.65	0.13	.1437467
0.88	2.88	.0279956	10.66	0.13	.1419651
0.89	2.87	2.813979E-02	10.67	0.13	.1401861
0.90	2.86	2.828047E-02	10.68	0.13	.1384099
0.91	2.85	2.841643E-02	10.69	0.13	.1366359
0.92	2.84	2.854658E-02	10.70	0.13	.1358442
0.93	2.82	2.774934E-02	10.71	0.13	.1350659
0.94	2.81	2.783693E-02	10.72	0.13	.1399185
0.95	2.80	2.791852E-02	10.73	0.13	.145246
0.96	2.79	2.799296E-02	10.74	0.12	.1467285
0.97	2.78	2.805997E-02	10.75	0.12	.1449604
0.98	2.77	2.811899E-02	10.76	0.12	.1431939
0.99	2.76	2.816948E-02	10.77	0.12	.1414314
1.00	2.75	2.821129E-02	10.78	0.12	.1396699
1.01	2.74	2.824409E-02	10.79	0.12	.1379126
1.02	2.73	2.826765E-02	10.80	0.12	.1363989
1.03	2.72	2.828161E-02	10.81	0.12	.1356285

P&L760

APPENDIX C
CALCULATED DEVIATIONS
FOR THREE SETS OF WILSON COEFFICIENTS



FILE:PERO				Grid Search Wijs				
$X1(i)$	$Pt(i)$	$Pt(c)$	$\%dPt$	$Y1(i)$	$Y1(c)$	$T(i)$	$T(c)$	$P1(c)$
0.0498	16.5	12.6	23.90	0.6909	0.6541	0.0	0.0	8.2
0.0963	31.1	25.7	17.40	0.8239	0.8430	0.0	0.0	21.6
0.1545	55.4	52.3	5.70	0.9260	0.9312	0.0	0.0	48.7
0.2052	85.8	86.8	1.20	0.9650	0.9632	0.0	0.0	83.6
0.2391	119.4	116.9	2.10	0.9765	0.9750	0.0	0.0	114.0
$W(12) = 4.81$				$W(21) = 2.78$				
$BESE(Y) = 0.0187$				a.d.($Y1$) = 0.0129				
a.d.ABS(Pt) = 3.2				a.d.REL(Pt) = 0.10				
$R^2/N = 0.0057$				a.d.(T) = 0.09				

FILE:PERO

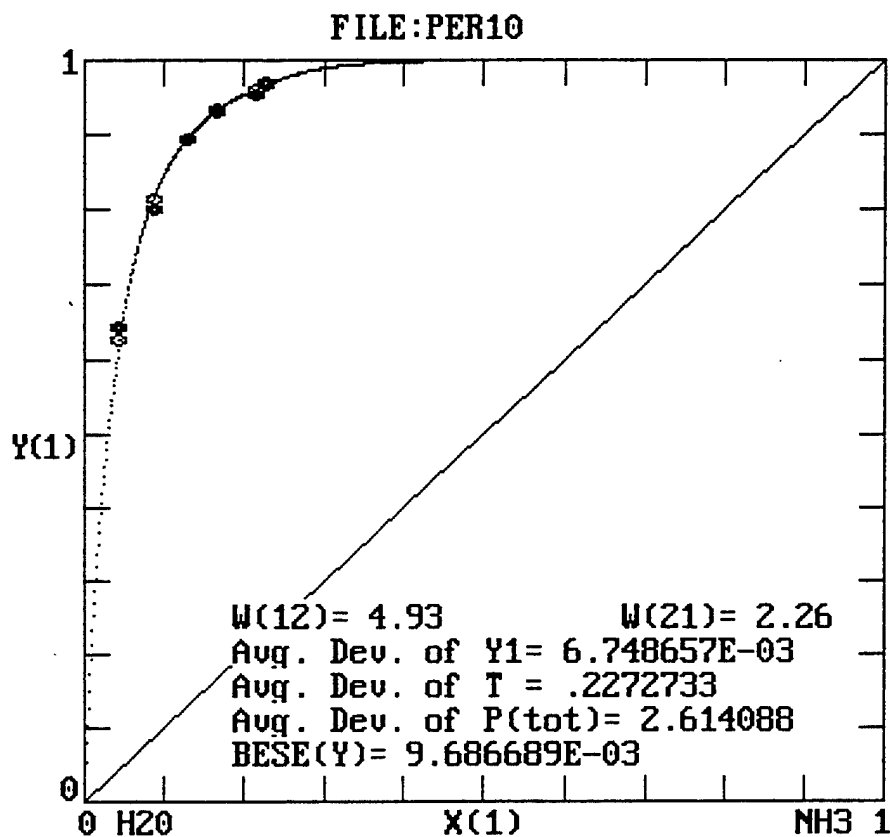
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	Pl(c)
0.0498	16.5	13.0	21.30	0.6909	0.6651	0.0	0.0	8.6
0.0963	31.1	26.1	16.10	0.8239	0.8449	0.0	0.0	22.0
0.1545	55.4	51.7	6.60	0.9260	0.9300	0.0	0.0	48.1
0.2052	85.8	84.4	1.70	0.9650	0.9617	0.0	0.0	81.2
0.2391	119.4	112.5	5.70	0.9765	0.9736	0.0	0.0	109.6

W(12)= 5.396007 W(21)= 2.568104
 BESE(Y)= 0.0151 a.d.(Y1)= 0.0114
 a.d.ABS(Pt)= 4.1 a.d.REL(Pt)= 0.103
 R^2/N=0.00655 a.d.(T)= 0.09

FILE:PERO

X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	Pl(c)
0.0498	16.5	15.2	8.10	0.6909	0.7129	0.0	0.0	10.8
0.0963	31.1	30.4	2.30	0.8239	0.8662	0.0	0.0	26.3
0.1545	55.4	58.5	5.70	0.9260	0.9374	0.0	0.0	54.9
0.2052	85.8	93.0	8.40	0.9650	0.9646	0.0	0.0	89.8
0.2391	119.4	117.6	1.50	0.9765	0.9760	0.0	-1.0	114.8

W(12)= 5.48988 W(21)= 2.261285
 BESE(Y)= 0.0219 a.d.(Y1)= 0.0153
 a.d.ABS(Pt)= 2.8 a.d.REL(Pt)= 0.052
 R^2/N=0.01673 a.d.(T)= 0.25



FILE:PER10				Grid Search Wijs				
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0439	25.6	23.5	8.10	0.6445	0.6253	10.0	10.0	14.7
0.0870	46.0	44.4	3.50	0.8009	0.8133	10.0	10.0	36.1
0.1294	71.8	73.0	1.60	0.8942	0.8942	10.0	10.0	65.2
0.1665	102.1	105.6	3.40	0.9314	0.9319	10.0	10.0	98.4
0.2147	156.4	160.1	2.40	0.9540	0.9596	10.0	10.0	153.7
0.2280	175.3	171.7	2.10	0.9686	0.9658	10.0	9.0	165.8
W(12)= 4.93				W(21)= 2.26				
BESE(Y)= 0.0097				a.d.(Y1)= 0.0067				
a.d.ABS(Pt)= 2.6				a.d.REL(Pt)= 0.04				
R^2/N=0.0033				a.d.(T)= 0.23				

FILE:PER10

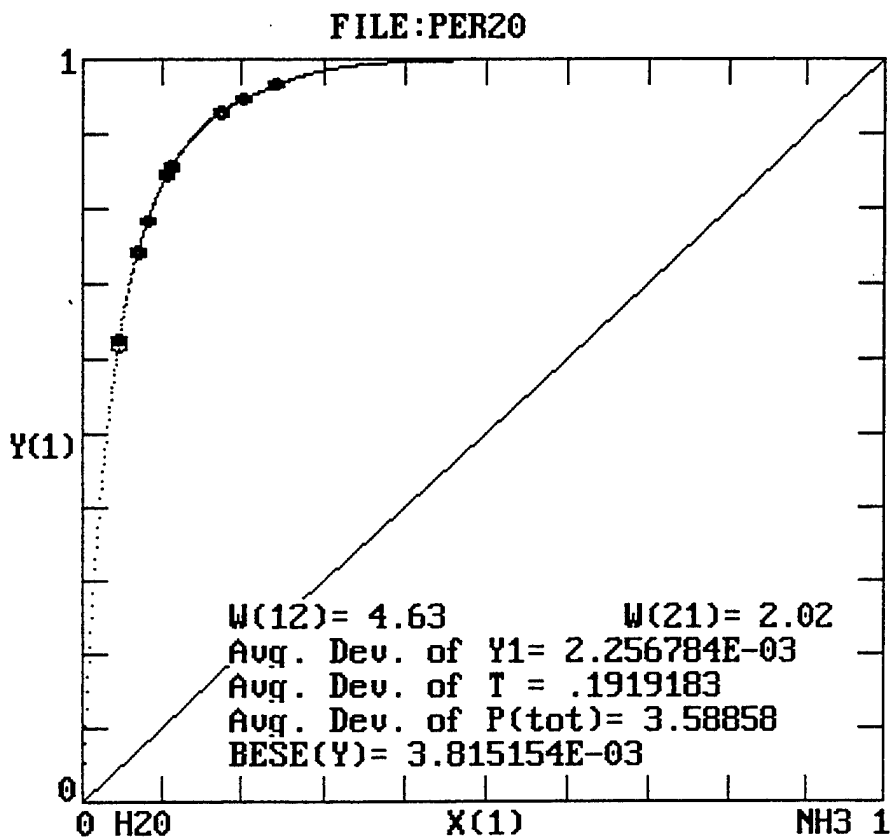
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0439	25.6	23.1	9.80	0.6445	0.6185	10.0	10.0	14.3
0.0870	46.0	43.2	6.20	0.8009	0.8078	10.0	10.0	34.9
0.1294	71.8	70.4	1.90	0.8942	0.8902	10.0	10.0	62.7
0.1665	102.1	101.4	0.70	0.9314	0.9290	10.0	10.0	94.2
0.2147	156.4	153.2	2.10	0.9540	0.9576	10.0	10.0	146.7
0.2280	175.3	170.0	3.00	0.9686	0.9630	10.0	10.0	163.7

W(12)= 5.313761 W(21)= 2.205537
 BESE(Y)= 0.0115 a.d.(Y1)= 0.0081
 a.d.ABS(Pt)= 2.7 a.d.REL(Pt)= 0.039
 R^2/N=0.00449 a.d.(T)= 0.09

FILE:PER10

X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0439	25.6	24.6	3.90	0.6445	0.6414	10.0	10.0	15.8
0.0870	46.0	46.1	0.30	0.8009	0.8198	10.0	10.0	37.8
0.1294	71.8	74.8	4.10	0.8942	0.8962	10.0	10.0	67.0
0.1665	102.1	106.8	4.60	0.9314	0.9322	10.0	10.0	99.6
0.2147	156.4	159.8	2.20	0.9540	0.9591	10.0	10.0	153.3
0.2280	175.3	176.4	0.60	0.9686	0.9642	10.0	10.0	170.1

W(12)= 5.357194 W(21)= 2.07638
 BESE(Y)= 0.0084 a.d.(Y1)= 0.0057
 a.d.ABS(Pt)= 2.2 a.d.REL(Pt)= 0.026
 R^2/N=0.00463 a.d.(T)= 0.08



FILE:PER20				Grid Search Wijs				
$X1(i)$	$Pt(i)$	$Pt(c)$	$\%dPt$	$Y1(i)$	$Y1(c)$	$T(i)$	$T(c)$	$P1(c)$
0.0441	43.8	43.3	1.00	0.6256	0.6151	19.9	19.9	26.7
0.0685	61.9	62.1	0.30	0.7399	0.7398	19.9	19.9	45.9
0.0690	62.0	62.5	0.80	0.7419	0.7417	19.9	19.9	46.4
0.0813	71.8	73.3	2.10	0.7827	0.7836	19.9	19.9	57.4
0.1067	95.7	98.7	3.10	0.8422	0.8453	19.9	19.9	83.4
0.1130	101.0	105.7	4.60	0.8545	0.8570	19.9	19.9	90.6
0.1743	179.0	189.0	5.60	0.9279	0.9283	19.9	19.9	175.4
0.2029	227.9	238.4	4.60	0.9460	0.9464	19.9	19.9	225.7
0.2439	312.7	311.2	0.50	0.9671	0.9650	19.9	18.9	300.3
$W(12) = 4.63$				$W(21) = 2.02$				
$BESE(Y) = 0.0038$				a.d.($Y1$) = 0.0023				
a.d.ABS(Pt) = 3.6				a.d.REL(Pt) = 0.03				
$R^2/N = 0.0002$				a.d.(T) = 0.19				

FILE:PER20

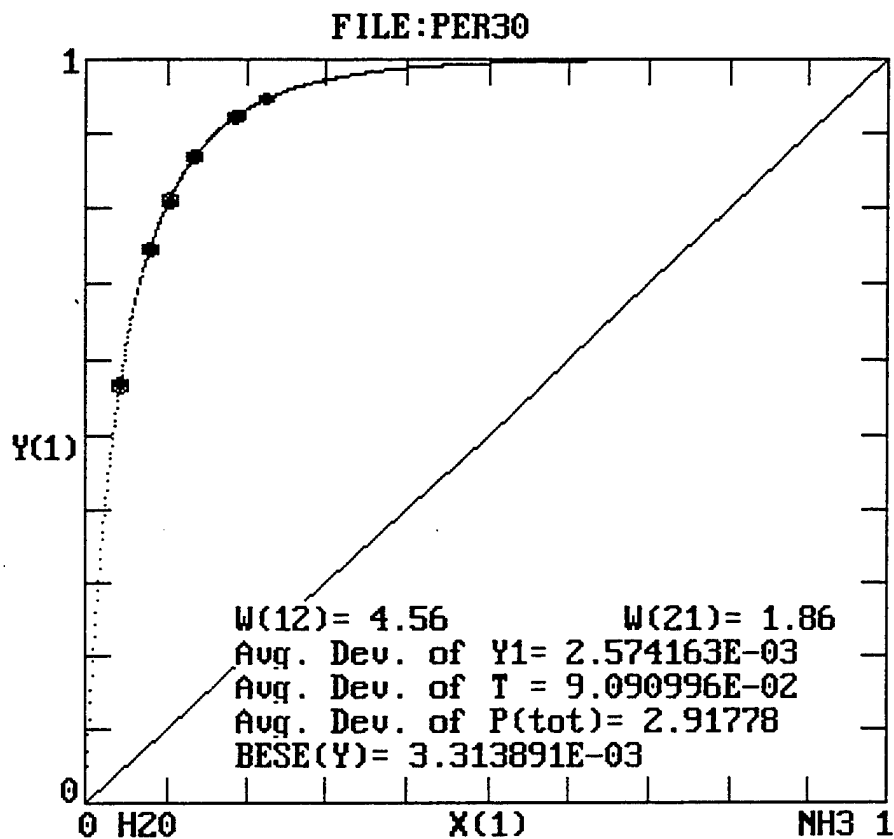
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0441	43.8	42.4	3.20	0.6256	0.6063	19.9	19.9	25.7
0.0685	61.9	60.1	2.80	0.7399	0.7312	19.9	19.9	44.0
0.0690	62.0	60.5	2.40	0.7419	0.7332	19.9	19.9	44.4
0.0813	71.8	70.7	1.50	0.7827	0.7755	19.9	19.9	54.9
0.1067	95.7	94.5	1.20	0.8422	0.8383	19.9	19.9	79.2
0.1130	101.0	101.0	0.00	0.8545	0.8502	19.9	19.9	85.9
0.1743	179.0	178.4	0.40	0.9279	0.9238	19.9	19.9	164.8
0.2029	227.9	224.1	1.70	0.9460	0.9428	19.9	19.9	211.2
0.2439	312.7	301.7	3.50	0.9671	0.9612	19.9	19.9	290.0

W(12)= 5.223645 W(21)= 1.923144
 BESE(Y)= 0.0086 a.d.(Y1)= 0.0073
 a.d.ABS(Pt)= 2.5 a.d.REL(Pt)= 0.019
 R^2/N=0.00280 a.d.(T)= 0.09

FILE:PER20

X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0441	43.8	42.7	2.60	0.6256	0.6090	19.9	19.9	26.0
0.0685	61.9	60.6	2.10	0.7399	0.7332	19.9	19.9	44.4
0.0690	62.0	61.0	1.60	0.7419	0.7352	19.9	19.9	44.9
0.0813	71.8	71.3	0.70	0.7827	0.7772	19.9	19.9	55.4
0.1067	95.7	95.2	0.50	0.8422	0.8395	19.9	19.9	80.0
0.1130	101.0	101.8	0.80	0.8545	0.8513	19.9	19.9	86.7
0.1743	179.0	179.5	0.30	0.9279	0.9243	19.9	19.9	165.9
0.2029	227.9	225.3	1.10	0.9460	0.9430	19.9	19.9	212.5
0.2439	312.7	303.1	3.10	0.9671	0.9613	19.9	19.9	291.4

W(12)= 5.228765 W(21)= 1.908304
 BESE(Y)= 0.0072 a.d.(Y1)= 0.0060
 a.d.ABS(Pt)= 2.0 a.d.REL(Pt)= 0.014
 R^2/N=0.00241 a.d.(T)= 0.09



FILE:PER30				Grid Search Wijs				
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0415	72.3	70.3	2.80	0.5698	0.5629	30.1	30.1	39.6
0.0783	115.5	114.8	0.60	0.7472	0.7450	30.1	30.1	85.6
0.1026	148.5	150.5	1.40	0.8081	0.8122	30.1	30.1	122.3
0.1341	201.6	205.0	1.70	0.8681	0.8688	30.1	30.1	178.1
0.1860	315.0	317.3	0.70	0.9213	0.9229	30.1	30.1	292.9
0.1868	315.4	319.3	1.20	0.9230	0.9235	30.1	30.1	294.9
0.2243	426.7	420.6	1.40	0.9482	0.9462	30.1	30.1	398.0
W(12)= 4.56				W(21)= 1.86				
BESE(Y)= 0.0033				a.d.(Y1)= 0.0026				
a.d.ABS(Pt)= 2.9				a.d.REL(Pt)= 0.014				
R^2/N=0.00025				a.d.(T)= 0.09				

FILE:PER30

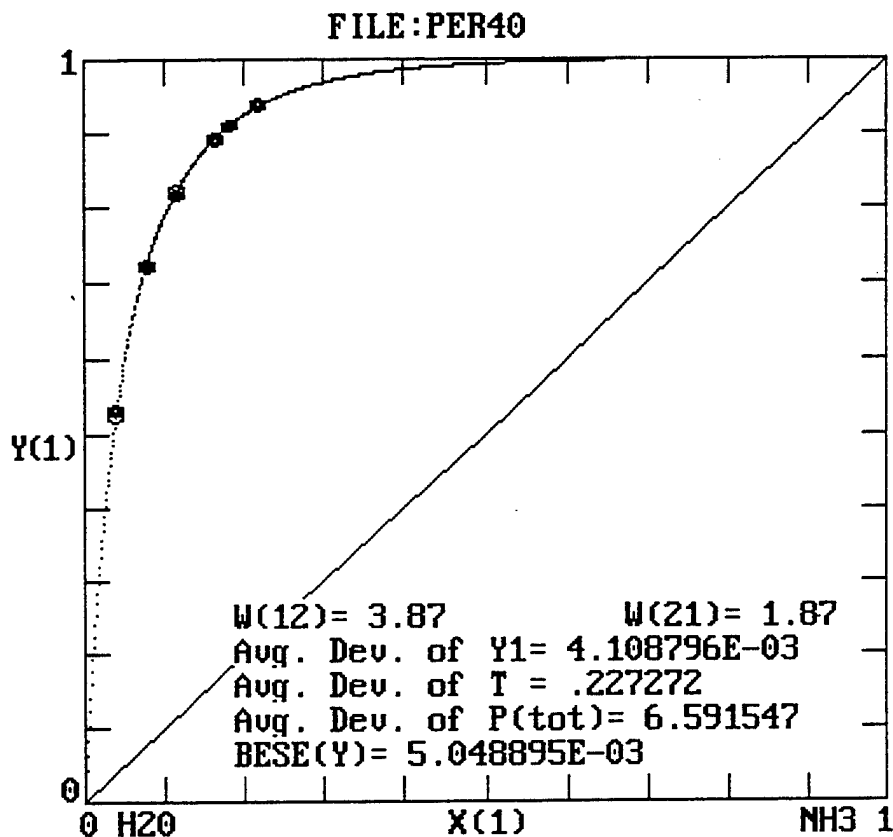
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0415	72.3	71.4	1.20	0.5698	0.5698	30.1	30.1	40.7
0.0783	115.5	116.0	0.40	0.7472	0.7471	30.1	30.1	86.7
0.1026	148.5	151.0	1.70	0.8081	0.8123	30.1	30.1	122.7
0.1341	201.6	203.8	1.10	0.8681	0.8676	30.1	30.1	176.8
0.1860	315.0	311.1	1.20	0.9213	0.9208	30.1	30.1	286.5
0.1868	315.4	313.0	0.80	0.9230	0.9214	30.1	30.1	288.4
0.2243	426.7	408.6	4.20	0.9482	0.9442	30.1	30.1	385.8

W(12)= 5.119745 W(21)= 1.694941
 BESE(Y)= 0.0023 a.d.(Y1)= 0.0016
 a.d.ABS(Pt)= 4.4 a.d.REL(Pt)= 0.015
 R^2/N=0.00056 a.d.(T)= 0.09

FILE:PER30

X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0415	72.3	69.7	3.60	0.5698	0.5591	30.1	30.1	39.0
0.0783	115.5	112.7	2.40	0.7472	0.7400	30.1	30.1	83.4
0.1026	148.5	146.8	1.10	0.8081	0.8072	30.1	30.1	118.5
0.1341	201.6	198.5	1.50	0.8681	0.8642	30.1	30.1	171.5
0.1860	315.0	304.1	3.50	0.9213	0.9192	30.1	30.1	279.5
0.1868	315.4	306.0	3.00	0.9230	0.9198	30.1	30.1	281.4
0.2243	426.7	400.6	6.10	0.9482	0.9433	30.1	30.1	377.9

W(12)= 5.096943 W(21)= 1.750479
 BESE(Y)= 0.0056 a.d.(Y1)= 0.0047
 a.d.ABS(Pt)= 8.1 a.d.REL(Pt)= 0.030
 R^2/N=0.00116 a.d.(T)= 0.09



FILE:PER40				Grid Search Wijs				
$X1(i)$	$Pt(i)$	$Pt(c)$	$\%dPt$	$Y1(i)$	$Y1(c)$	$T(i)$	$T(c)$	$P1(c)$
0.0400	114.6	112.0	2.20	0.5332	0.5249	40.0	40.0	58.8
0.0775	183.7	181.4	1.30	0.7240	0.7204	40.0	40.0	130.7
0.1163	267.6	272.3	1.80	0.8165	0.8241	40.0	40.0	224.4
0.1630	397.7	410.9	3.30	0.8891	0.8923	40.0	40.0	366.7
0.1815	470.4	475.6	1.10	0.9092	0.9101	40.0	40.0	432.9
0.2179	613.9	602.3	1.90	0.9384	0.9375	40.0	39.0	564.7
$W(12) = 3.87$				$W(21) = 1.87$				
$BESE(Y) = 0.0050$				a.d.($Y1$) = 0.0041				
a.d.ABS(Pt) = 6.6				a.d.REL(Pt) = 0.019				
$R^2/N = 0.00042$				a.d.(T) = 0.23				

FILE:PER40

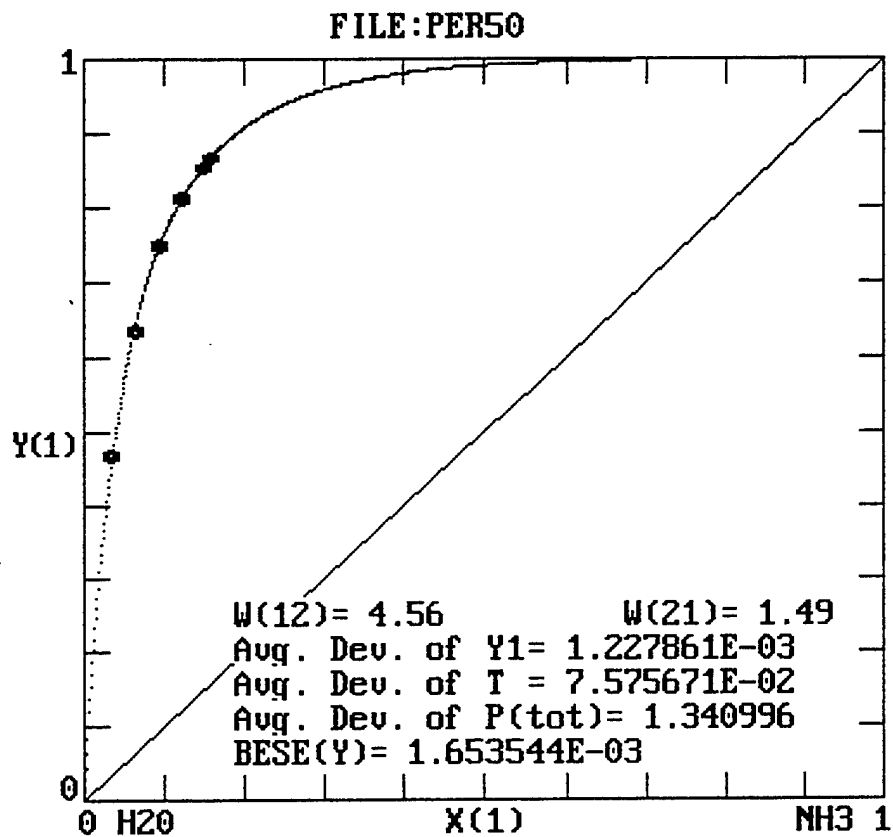
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0400	114.6	115.2	0.50	0.5332	0.5375	40.0	40.0	61.9
0.0775	183.7	184.1	0.20	0.7240	0.7237	40.0	40.0	133.2
0.1163	267.6	270.4	1.10	0.8165	0.8219	40.0	40.0	222.3
0.1630	397.7	397.4	0.10	0.8891	0.8875	40.0	40.0	352.7
0.1815	470.4	455.4	3.20	0.9092	0.9050	40.0	40.0	412.2
0.2179	613.9	583.7	4.90	0.9384	0.9308	40.0	40.0	543.3

W(12)= 5.006264 W(21)= 1.521318
 BESE(Y)= 0.0046 a.d.(Y1)= 0.0039
 a.d.ABS(Pt)= 8.2 a.d.REL(Pt)= 0.017
 R^2/N=0.00170 a.d.(T)= 0.09

FILE:PER40

X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0400	114.6	110.9	3.20	0.5332	0.5198	40.0	40.0	57.6
0.0775	183.7	176.0	4.20	0.7240	0.7112	40.0	40.0	125.2
0.1163	267.6	258.6	3.40	0.8165	0.8141	40.0	40.0	210.5
0.1630	397.7	381.6	4.00	0.8891	0.8832	40.0	40.0	337.0
0.1815	470.4	438.2	6.80	0.9092	0.9016	40.0	40.0	395.1
0.2179	613.9	564.1	8.10	0.9384	0.9287	40.0	40.0	523.9

W(12)= 4.966953 W(21)= 1.611134
 BESE(Y)= 0.0094 a.d.(Y1)= 0.0086
 a.d.ABS(Pt)= 19.7 a.d.REL(Pt)= 0.050
 R^2/N=0.00347 a.d.(T)= 0.09



FILE:PER50				Grid Search Wtjs				
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0347	168.7	167.8	0.50	0.4689	0.4660	50.0	50.0	78.2
0.0622	238.4	237.7	0.30	0.6346	0.6351	50.0	50.0	151.0
0.0938	329.6	330.7	0.30	0.7482	0.7484	50.0	50.0	247.5
0.1216	422.3	424.8	0.60	0.8091	0.8117	50.0	50.0	344.8
0.1485	528.4	527.8	0.10	0.8543	0.8547	50.0	50.0	451.1
0.1567	562.3	560.1	0.40	0.8663	0.8655	50.0	50.0	484.8
W(12)= 4.56				W(21)= 1.49				
BESE(Y)= 0.0017				a.d.(Y1)= 0.0012				
a.d.ABS(Pt)= 1.3				a.d.REL(Pt)= 0.004				
R^2/N=0.00003				a.d.(T)= 0.08				

FILE:PER50

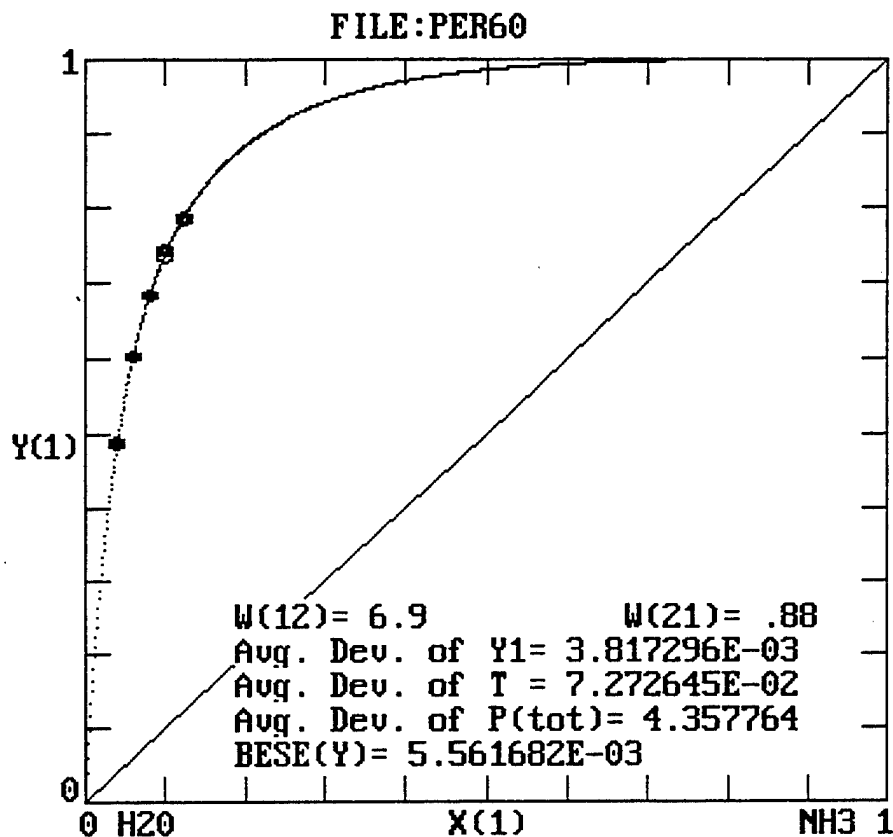
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	Pl(c)
0.0347	168.7	170.1	0.80	0.4689	0.4731	50.0	50.0	80.5
0.0622	238.4	241.1	1.10	0.6346	0.6401	50.0	50.0	154.3
0.0938	329.6	334.5	1.50	0.7482	0.7510	50.0	50.0	251.2
0.1216	422.3	428.2	1.40	0.8091	0.8129	50.0	50.0	348.1
0.1485	528.4	529.9	0.30	0.8543	0.8549	50.0	50.0	453.0
0.1567	562.3	561.7	0.10	0.8663	0.8655	50.0	50.0	486.2

W(12)= 4.877844 W(21)= 1.385117
 BESE(Y)= 0.0034 a.d.(Y1)= 0.0029
 a.d.ABS(Pt)= 2.8 a.d.REL(Pt)= 0.009
 R^2/N=0.00011 a.d.(T)= 0.08

FILE:PER50

X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	Pl(c)
0.0347	168.7	163.9	2.80	0.4689	0.4532	50.0	50.0	74.3
0.0622	238.4	230.2	3.50	0.6346	0.6231	50.0	50.0	143.4
0.0938	329.6	318.4	3.40	0.7482	0.7387	50.0	50.0	235.2
0.1216	422.3	407.8	3.40	0.8091	0.8039	50.0	50.0	327.9
0.1485	528.4	505.7	4.30	0.8543	0.8484	50.0	50.0	429.0
0.1567	562.3	537.9	4.30	0.8663	0.8593	50.0	50.0	462.3

W(12)= 4.83192 W(21)= 1.483979
 BESE(Y)= 0.0098 a.d.(Y1)= 0.0091
 a.d.ABS(Pt)= 14.3 a.d.REL(Pt)= 0.036
 R^2/N=0.00098 a.d.(T)= 0.09



FILE:PER60				Grid Search Wijs				
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0407	281.0	282.8	0.60	0.4872	0.4914	60.0	60.0	139.0
0.0608	357.7	354.6	0.90	0.6036	0.6036	60.0	60.0	214.0
0.0819	438.9	434.9	0.90	0.6844	0.6848	60.0	60.0	297.8
0.0986	511.2	502.2	1.80	0.7439	0.7327	60.0	60.0	367.9
0.1241	606.2	610.1	0.60	0.7849	0.7881	60.0	60.0	480.8
W(12)= 6.9				W(21)= .88				
BESE(Y)= 0.0056				a.d.(Y1)= 0.0038				
a.d.ABS(Pt)= 4.4				a.d.REL(Pt)= 0.010				
R^2/N=0.00030				a.d.(T)= 0.07				

FILE:PER60

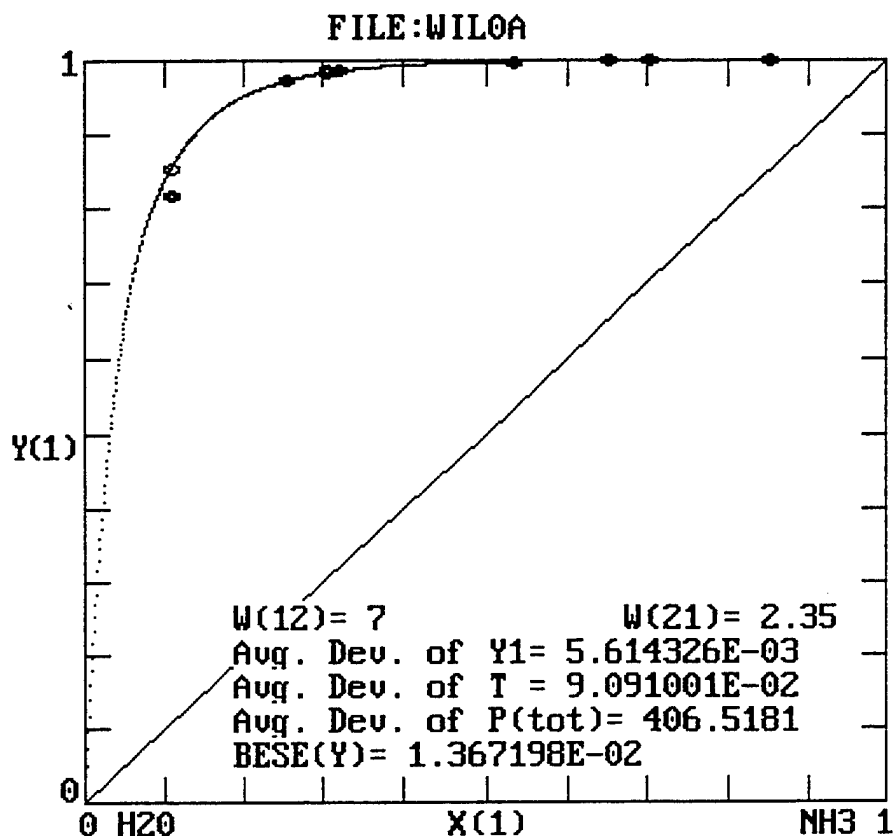
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0407	281.0	283.3	0.80	0.4872	0.4926	60.0	60.0	139.6
0.0608	357.7	358.3	0.20	0.6036	0.6081	60.0	60.0	217.9
0.0819	438.9	444.0	1.20	0.6844	0.6920	60.0	60.0	307.3
0.0986	511.2	517.3	1.20	0.7439	0.7414	60.0	60.0	383.5
0.1241	606.2	603.0	0.50	0.7849	0.8049	60.0	58.0	485.4

W(12)= 4.733871 W(21)= 1.281342
 BESE(Y)= 0.0101 a.d.(Y1)= 0.0080
 a.d.ABS(Pt)= 3.5 a.d.REL(Pt)= 0.008
 R^2/N=0.00150 a.d.(T)= 0.45

FILE:PER60

X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0407	281.0	273.8	2.60	0.4872	0.4751	60.0	60.0	130.1
0.0608	357.7	344.3	3.70	0.6036	0.5923	60.0	60.0	203.9
0.0819	438.9	425.5	3.10	0.6844	0.6788	60.0	60.0	288.8
0.0986	511.2	495.4	3.10	0.7439	0.7302	60.0	60.0	361.7
0.1241	606.2	594.5	1.90	0.7849	0.7930	60.0	59.0	471.4

W(12)= 4.69074 W(21)= 1.369721
 BESE(Y)= 0.0106 a.d.(Y1)= 0.0101
 a.d.ABS(Pt)= 12.3 a.d.REL(Pt)= 0.029
 R^2/N=0.00088 a.d.(T)= 0.25



FILE:WILOA				Grid Search Wijs				
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.1080	20.8	27.4	31.90	0.8160	0.8545	0.0	0.0	23.4
0.2540	128.3	107.5	16.20	0.9742	0.9731	0.0	0.0	104.6
0.3050	219.8	154.9	29.50	0.9858	0.9839	0.0	0.0	152.4
0.3210	257.3	172.4	33.00	0.9883	0.9862	0.0	0.0	170.0
0.5330	1203.3	561.9	53.30	0.9980	0.9983	0.0	0.0	560.9
0.6500	1818.0	956.5	47.40	0.9991	0.9995	0.0	0.0	956.0
0.7020	2114.0	1190.9	43.70	0.9994	0.9998	0.0	0.0	1190.6
0.8500	2764.0	2115.1	23.50	0.9998	1.0000	0.0	0.0	2115.1
W(12)= 7				W(21)= 2.35				
BESE(Y)= 0.0137				a.d.(Y1)= 0.0056				
a.d.ABS(Pt)= 406.5				a.d.REL(Pt)= 0.348				
R^2/N=0.04404				a.d.(T)= 0.09				

FILE:WIL0A

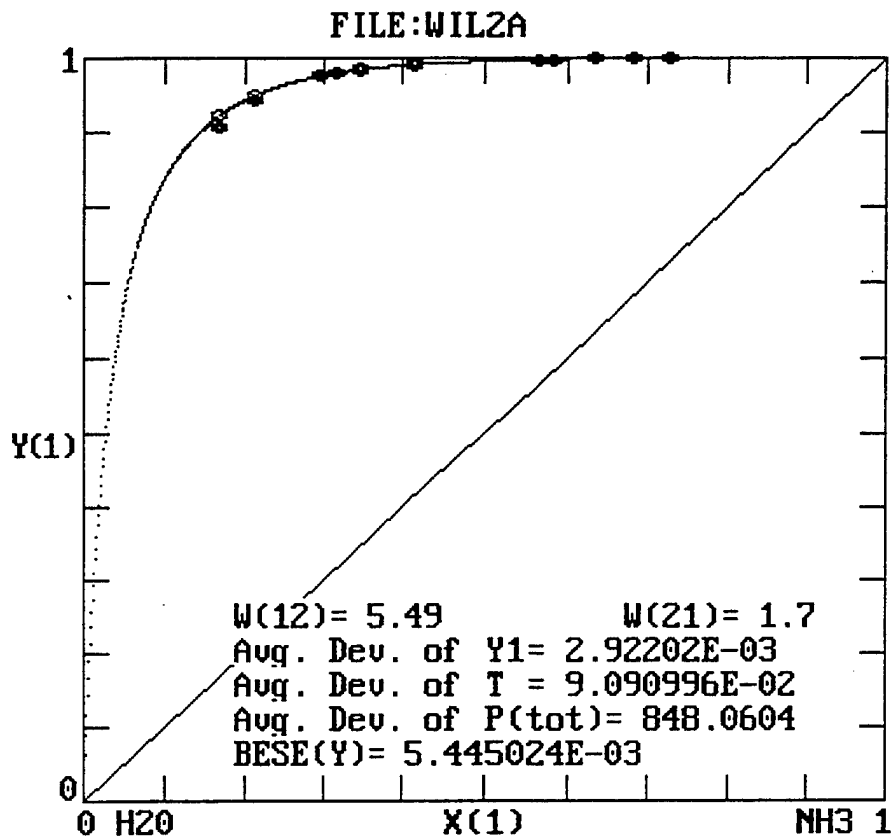
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.1080	20.8	30.3	46.20	0.8160	0.8694	0.0	0.0	26.4
0.2540	128.3	126.7	1.30	0.9742	0.9775	0.0	0.0	123.8
0.3050	219.8	184.2	16.20	0.9858	0.9867	0.0	0.0	181.8
0.3210	257.3	205.4	20.20	0.9883	0.9886	0.0	0.0	203.1
0.5330	1203.3	665.8	44.70	0.9980	0.9986	0.0	0.0	664.8
0.6500	1818.0	1107.2	39.10	0.9991	0.9996	0.0	0.0	1106.7
0.7020	2114.0	1357.9	35.80	0.9994	0.9998	0.0	0.0	1357.6
0.8500	2764.0	2267.5	18.00	0.9998	1.0000	0.0	0.0	2267.4

W(12) = 5.396007 W(21) = 2.568104
 BESE(Y) = 0.0189 a.d.(Y1) = 0.0074
 a.d.ABS(Pt) = 325.0 a.d.REL(Pt) = 0.277
 R^2/N = 0.05203 a.d.(T) = 0.09

FILE:WIL0A

X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.1080	20.8	35.2	69.50	0.8160	0.8866	0.0	0.0	31.2
0.2540	128.3	136.7	6.60	0.9742	0.9786	0.0	0.0	133.8
0.3050	219.8	195.1	11.20	0.9858	0.9870	0.0	0.0	192.5
0.3210	257.3	216.4	15.90	0.9883	0.9888	0.0	0.0	214.0
0.5330	1203.3	672.5	44.10	0.9980	0.9985	0.0	0.0	671.5
0.6500	1818.0	1107.9	39.10	0.9991	0.9996	0.0	0.0	1107.4
0.7020	2114.0	1355.9	35.90	0.9994	0.9998	0.0	0.0	1355.5
0.8500	2764.0	2261.3	18.20	0.9998	1.0000	0.0	0.0	2261.3

W(12) = 5.48988 W(21) = 2.261285
 BESE(Y) = 0.0250 a.d.(Y1) = 0.0098
 a.d.ABS(Pt) = 323.8 a.d.REL(Pt) = 0.301
 R^2/N = 0.05903 a.d.(T) = 0.09



FILE:WIL2A

				Grid Search Wijs				
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.1680	151.0	181.8	20.40	0.9065	0.9232	20.0	20.0	167.8
0.2130	240.6	255.9	6.40	0.9447	0.9500	20.0	20.0	243.1
0.2940	522.1	432.5	17.20	0.9774	0.9755	20.0	20.0	421.9
0.3140	632.6	486.0	23.20	0.9812	0.9793	20.0	20.0	475.9
0.3450	832.4	577.6	30.60	0.9865	0.9840	20.0	20.0	568.3
0.4160	1431.1	831.9	41.90	0.9930	0.9912	20.0	20.0	824.6
0.5650	2980.0	1619.8	45.60	0.9977	0.9976	20.0	20.0	1616.0
0.5830	3128.0	1743.5	44.30	0.9977	0.9980	20.0	20.0	1740.0
0.6340	3665.0	2133.3	41.80	0.9983	0.9988	20.0	20.0	2130.7
0.6830	4140.0	2567.3	38.00	0.9987	0.9993	20.0	20.0	2565.5
0.7280	5365.0	3021.7	43.70	0.9991	0.9996	20.0	20.0	3020.5

$W(12) = 5.49$ $W(21) = 1.7$
 $BESE(Y) = 0.0054$ a.d.(Y1) = 0.0029
 a.d.ABS(Pt) = 848.1 a.d.REL(Pt) = 0.321
 $R^2/N = 0.01567$ a.d.(T) = 0.09

FILE:WIL2A

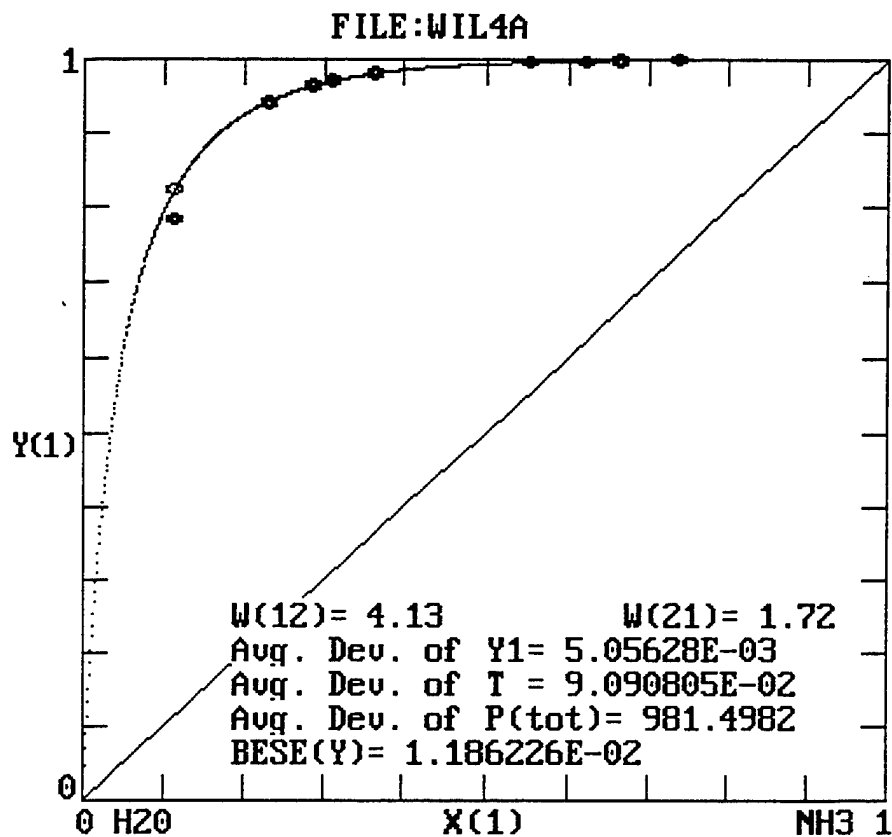
				f(S) Curved Fit Wijs				
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.1680	151.0	170.0	12.60	0.9065	0.9186	20.0	20.0	156.1
0.2130	240.6	242.9	1.00	0.9447	0.9480	20.0	20.0	230.3
0.2940	522.1	420.3	19.50	0.9774	0.9753	20.0	20.0	409.9
0.3140	632.6	474.6	25.00	0.9812	0.9793	20.0	20.0	464.8
0.3450	832.4	568.0	31.80	0.9865	0.9842	20.0	20.0	559.0
0.4160	1431.1	829.0	42.10	0.9930	0.9914	20.0	20.0	821.9
0.5650	2980.0	1640.2	45.00	0.9977	0.9978	20.0	20.0	1636.6
0.5830	3128.0	1767.2	43.50	0.9977	0.9981	20.0	20.0	1764.0
0.6340	3665.0	2166.6	40.90	0.9983	0.9989	20.0	20.0	2164.2
0.6830	4140.0	2609.0	37.00	0.9987	0.9994	20.0	20.0	2607.4
0.7280	5365.0	3069.5	42.80	0.9991	0.9996	20.0	20.0	3068.3

W(12)= 5.222683 W(21)= 1.92062
 BESE(Y)= 0.0040 a.d.(Y1)= 0.0023
 a.d.ABS(Pt)= 833.9 a.d.REL(Pt)= 0.310
 R^2/N=0.01621 a.d.(T)= 0.09

FILE:WIL2A

				f(S) Linear Fit Wijs				
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.1680	151.0	171.0	13.20	0.9065	0.9190	20.0	20.0	157.2
0.2130	240.6	244.1	1.50	0.9447	0.9482	20.0	20.0	231.5
0.2940	522.1	421.8	19.20	0.9774	0.9753	20.0	20.0	411.4
0.3140	632.6	476.1	24.70	0.9812	0.9793	20.0	20.0	466.3
0.3450	832.4	569.5	31.60	0.9865	0.9842	20.0	20.0	560.5
0.4160	1431.1	830.5	42.00	0.9930	0.9914	20.0	20.0	823.4
0.5650	2980.0	1641.2	44.90	0.9977	0.9978	20.0	20.0	1637.5
0.5830	3128.0	1768.1	43.50	0.9977	0.9981	20.0	20.0	1764.8
0.6340	3665.0	2167.1	40.90	0.9983	0.9989	20.0	20.0	2164.7
0.6830	4140.0	2609.2	37.00	0.9987	0.9994	20.0	20.0	2607.6
0.7280	5365.0	3069.4	42.80	0.9991	0.9996	20.0	20.0	3068.3

W(12)= 5.227474 W(21)= 1.906681
 BESE(Y)= 0.0041 a.d.(Y1)= 0.0024
 a.d.ABS(Pt)= 833.3 a.d.REL(Pt)= 0.310
 R^2/N=0.01614 a.d.(T)= 0.09



FILE:WIL4A				Grid Search Wijs				
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.1127	224.3	271.5	21.00	0.7850	0.8222	40.0	40.0	223.2
0.2310	708.4	683.6	3.50	0.9416	0.9430	40.0	40.0	644.6
0.2850	1116.0	953.2	14.60	0.9659	0.9639	40.0	40.0	918.7
0.3080	1337.0	1086.2	18.80	0.9716	0.9701	40.0	40.0	1053.7
0.3105	1353.0	1101.4	18.60	0.9729	0.9707	40.0	40.0	1069.0
0.3640	2000.0	1460.2	27.00	0.9840	0.9809	40.0	40.0	1432.4
0.5520	5191.0	3340.7	35.60	0.9955	0.9959	40.0	40.0	3327.1
0.6200	6474.0	4303.2	33.50	0.9970	0.9978	40.0	40.0	4293.8
0.6640	7293.0	5015.6	31.20	0.9976	0.9986	40.0	40.0	5008.5
0.7370	8593.0	6353.5	26.10	0.9984	0.9994	40.0	40.0	6349.4
W(12)= 4.13				W(21)= 1.72				
BESE(Y)= 0.0119				a.d.(Y1)= 0.0051				
a.d.ABS(Pt)= 981.5				a.d.REL(Pt)= 0.230				
R^2/N=0.01449				a.d.(T)= 0.09				

FILE:WIL4A

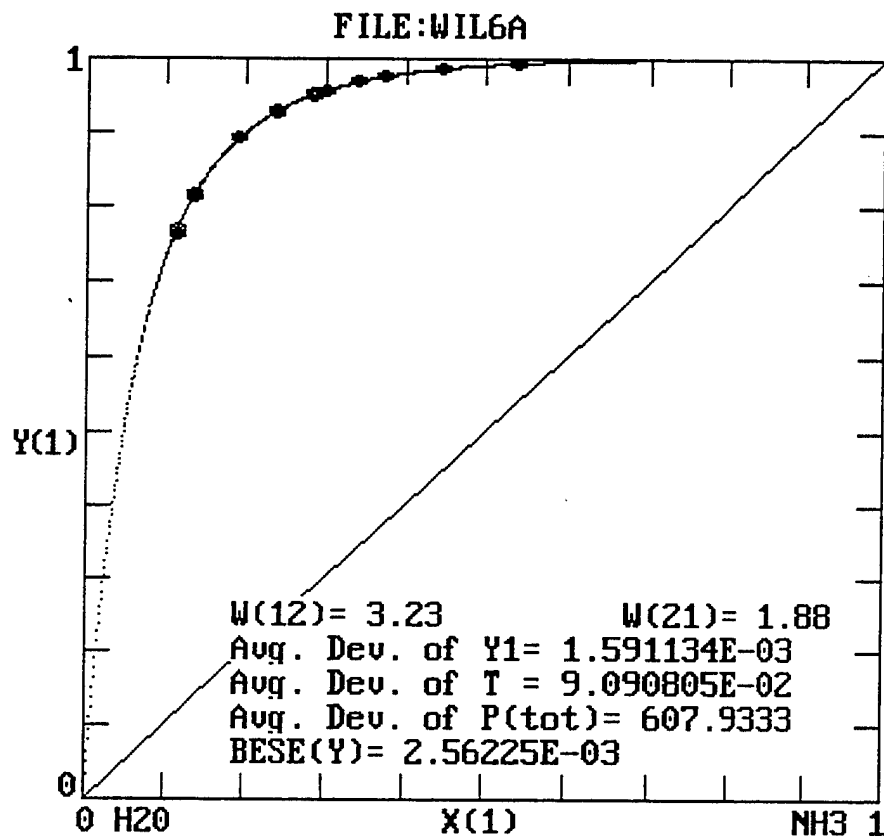
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.1127	224.3	261.7	16.70	0.7850	0.8150	40.0	40.0	213.3
0.2310	708.4	634.8	10.40	0.9416	0.9380	40.0	40.0	595.4
0.2850	1116.0	875.2	21.60	0.9659	0.9601	40.0	40.0	840.3
0.3080	1337.0	993.6	25.70	0.9716	0.9668	40.0	40.0	960.6
0.3105	1353.0	1007.1	25.60	0.9729	0.9674	40.0	40.0	974.3
0.3640	2000.0	1326.7	33.70	0.9840	0.9786	40.0	40.0	1298.3
0.5520	5191.0	3033.5	41.60	0.9955	0.9954	40.0	40.0	3019.7
0.6200	6474.0	3936.9	39.20	0.9970	0.9976	40.0	40.0	3927.3
0.6640	7293.0	4620.3	36.60	0.9976	0.9985	40.0	40.0	4613.2
0.7370	8593.0	5940.8	30.90	0.9984	0.9993	40.0	40.0	5936.9

W(12)= 5.006264 W(21)= 1.521318
 BESE(Y)= 0.0101 a.d.(Y1)= 0.0057
 a.d.ABS(Pt)=1173.4 a.d.REL(Pt)= 0.282
 R^2/N=0.01714 a.d.(T)= 0.09

FILE:WIL4A

X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.1127	224.3	250.2	11.60	0.7850	0.8068	40.0	40.0	201.9
0.2310	708.4	614.3	13.30	0.9416	0.9363	40.0	40.0	575.2
0.2850	1116.0	852.3	23.60	0.9659	0.9594	40.0	40.0	817.7
0.3080	1337.0	970.0	27.50	0.9716	0.9663	40.0	40.0	937.3
0.3105	1353.0	983.4	27.30	0.9729	0.9670	40.0	40.0	950.9
0.3640	2000.0	1302.3	34.90	0.9840	0.9785	40.0	40.0	1274.4
0.5520	5191.0	3017.0	41.90	0.9955	0.9955	40.0	40.0	3003.5
0.6200	6474.0	3926.3	39.40	0.9970	0.9976	40.0	40.0	3917.0
0.6640	7293.0	4614.0	36.70	0.9976	0.9985	40.0	40.0	4607.1
0.7370	8593.0	5941.5	30.90	0.9984	0.9994	40.0	40.0	5937.7

W(12)= 4.966953 W(21)= 1.611134
 BESE(Y)= 0.0080 a.d.(Y1)= 0.0053
 a.d.ABS(Pt)=1187.0 a.d.REL(Pt)= 0.287
 R^2/N=0.01830 a.d.(T)= 0.09



FILE:WIL6A				Grid Search Wijs				
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.1139	549.0	562.9	2.50	0.7620	0.7694	60.0	60.0	433.1
0.1360	681.6	681.0	0.10	0.8140	0.8160	60.0	60.0	555.7
0.1920	1092.0	1045.7	4.20	0.8920	0.8917	60.0	60.0	932.4
0.2380	1551.0	1422.8	8.30	0.9284	0.9276	60.0	60.0	1319.8
0.2860	2201.0	1898.9	13.70	0.9533	0.9515	60.0	60.0	1806.8
0.2990	2406.0	2043.4	15.10	0.9571	0.9563	60.0	60.0	1954.2
0.3400	3113.0	2545.1	18.20	0.9694	0.9686	60.0	60.0	2465.1
0.3740	3815.3	3016.4	20.90	0.9765	0.9760	60.0	60.0	2943.9
0.4440	5572.0	4155.2	25.40	0.9858	0.9861	60.0	60.0	4097.5
0.5400	8553.0	6111.1	28.60	0.9924	0.9936	60.0	60.0	6071.7
W(12)= 3.23				W(21)= 1.88				
BESE(Y)= 0.0026				a.d.(Y1)= 0.0016				
a.d.ABS(Pt)= 607.9				a.d.REL(Pt)= 0.137				
R^2/N=0.00079				a.d.(T)= 0.09				

FILE:WIL6A

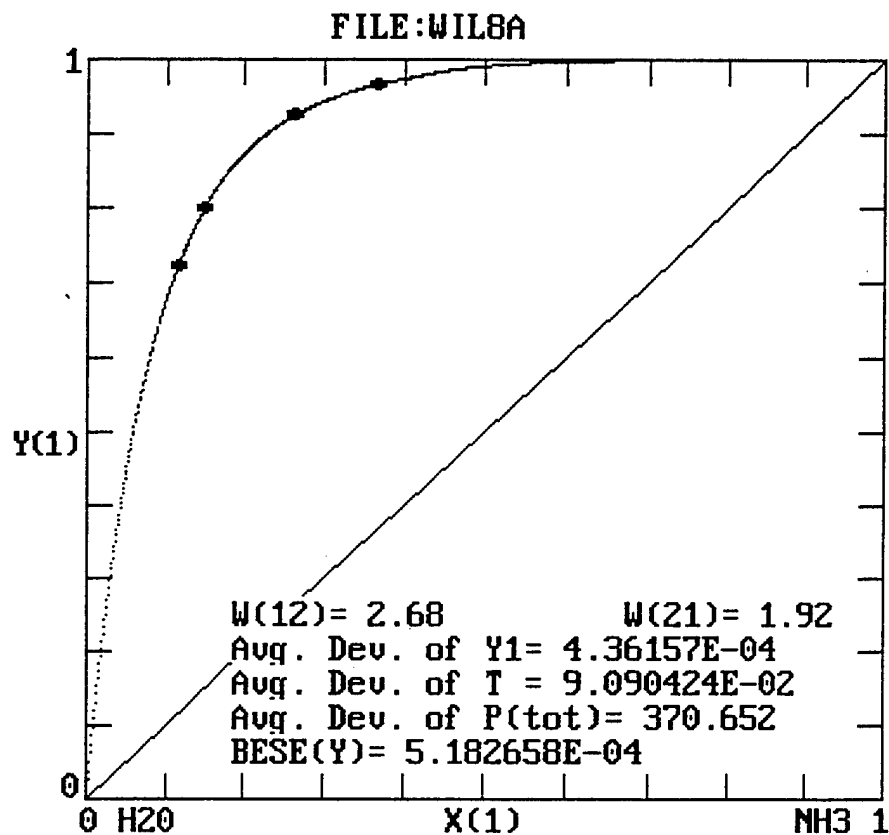
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.1139	549.0	588.9	7.30	0.7620	0.7775	60.0	60.0	457.9
0.1360	681.6	700.2	2.70	0.8140	0.8188	60.0	60.0	573.3
0.1920	1092.0	1027.8	5.90	0.8920	0.8872	60.0	60.0	911.9
0.2380	1551.0	1351.6	12.90	0.9284	0.9212	60.0	60.0	1245.2
0.2860	2201.0	1749.9	20.50	0.9533	0.9450	60.0	60.0	1653.6
0.2990	2406.0	1869.4	22.30	0.9571	0.9500	60.0	60.0	1775.9
0.3400	3113.0	2281.9	26.70	0.9694	0.9629	60.0	60.0	2197.3
0.3740	3815.3	2668.2	30.10	0.9765	0.9711	60.0	60.0	2591.1
0.4440	5572.0	3606.5	35.30	0.9858	0.9828	60.0	60.0	3544.3
0.5400	8553.0	5261.4	38.50	0.9924	0.9919	60.0	60.0	5218.8

W(12)= 4.733871 W(21)= 1.281342
 BESE(Y)= 0.0073 a.d.(Y1)= 0.0063
 a.d.ABS(Pt)= 854.5 a.d.REL(Pt)= 0.202
 R^2/N=0.00781 a.d.(T)= 0.09

FILE:WIL6A

X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.1139	549.0	563.9	2.70	0.7620	0.7680	60.0	60.0	433.1
0.1360	681.6	671.0	1.60	0.8140	0.8113	60.0	60.0	544.3
0.1920	1092.0	989.1	9.40	0.8920	0.8832	60.0	60.0	873.6
0.2380	1551.0	1306.8	15.70	0.9284	0.9190	60.0	60.0	1200.9
0.2860	2201.0	1700.4	22.70	0.9533	0.9438	60.0	60.0	1604.8
0.2990	2406.0	1818.9	24.40	0.9571	0.9490	60.0	60.0	1726.2
0.3400	3113.0	2229.4	28.40	0.9694	0.9625	60.0	60.0	2145.7
0.3740	3815.3	2615.2	31.50	0.9765	0.9709	60.0	60.0	2538.9
0.4440	5572.0	3555.6	36.20	0.9858	0.9828	60.0	60.0	3494.5
0.5400	8553.0	5220.6	39.00	0.9924	0.9920	60.0	60.0	5178.9

W(12)= 4.69074 W(21)= 1.369721
 BESE(Y)= 0.0067 a.d.(Y1)= 0.0060
 a.d.ABS(Pt)= 889.3 a.d.REL(Pt)= 0.212
 R^2/N=0.00901 a.d.(T)= 0.09



FILE:WIL8A				Grid Search Wijs				
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.1150	1122.0	1114.7	0.60	0.7240	0.7238	80.0	80.0	806.8
0.1490	1484.0	1455.7	1.90	0.7990	0.7999	80.0	80.0	1164.4
0.2650	3401.0	3107.8	8.60	0.9261	0.9257	80.0	80.0	2876.8
0.3680	6454.0	5300.2	17.90	0.9664	0.9666	80.0	80.0	5123.3
W(12)= 2.68				W(21)= 1.92				
BESE(Y)= 0.0005				a.d.(Y1)= 0.0004				
a.d.ABS(Pt)= 370.7				a.d.REL(Pt)= 0.073				
R^2/N=0.00001				a.d.(T)= 0.09				

FILE:WIL8A

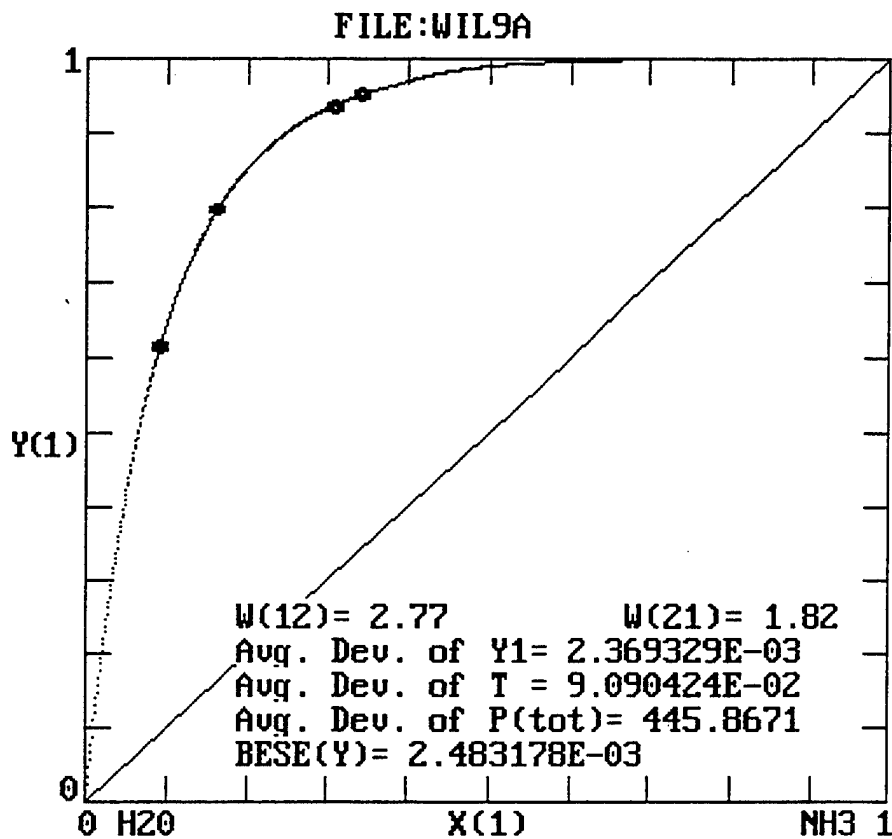
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.1150	1122.0	1181.2	5.30	0.7240	0.7363	80.0	80.0	869.7
0.1490	1484.0	1496.9	0.90	0.7990	0.8018	80.0	80.0	1200.3
0.2650	3401.0	2887.1	15.10	0.9261	0.9161	80.0	80.0	2644.9
0.3680	6454.0	4627.3	28.30	0.9664	0.9588	80.0	80.0	4436.6

W(12)= 4.390568 W(21)= 1.154137
 BESE(Y)= 0.0089 a.d.(Y1)= 0.0082
 a.d.ABS(Pt)= 603.2 a.d.REL(Pt)= 0.124
 R^2/N=0.00641 a.d.(T)= 0.09

FILE:WIL8A

X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.1150	1122.0	1167.7	4.10	0.7240	0.7334	80.0	80.0	856.3
0.1490	1484.0	1480.0	0.30	0.7990	0.7997	80.0	80.0	1183.6
0.2650	3401.0	2861.6	15.90	0.9261	0.9155	80.0	80.0	2619.9
0.3680	6454.0	4598.7	28.70	0.9664	0.9587	80.0	80.0	4408.6

W(12)= 4.377883 W(21)= 1.178314
 BESE(Y)= 0.0081 a.d.(Y1)= 0.0071
 a.d.ABS(Pt)= 611.1 a.d.REL(Pt)= 0.122
 R^2/N=0.00657 a.d.(T)= 0.09



```

.FILE:WIL9A
Grid Search Wijs
X1(i)   Pt(i)   Pt(c)   %dPt   Y1(i)   Y1(c)   T(i)   T(c)   P1(c)
0.0900  1234.0   1221.5   1.00   0.6160  0.6124   90.0   90.0   748.0
0.1620  2091.0   2092.7   0.10   0.7960  0.7980   90.0   90.0  1669.9
0.3080  5404.0   4942.0   8.50   0.9350  0.9371   90.0   90.0  4631.1
0.3430  7180.0   5872.7  18.20   0.9534  0.9517   90.0   90.0  5588.8
      W(12)= 2.77      W(21)= 1.82
      BESE(Y)= 0.0025   a.d.(Y1)= 0.0024
      a.d.ABS(Pt)= 445.9 a.d.REL(Pt)= 0.070
      R^2/N=0.00029    a.d.(T)= 0.09

```

FILE:WIL9A

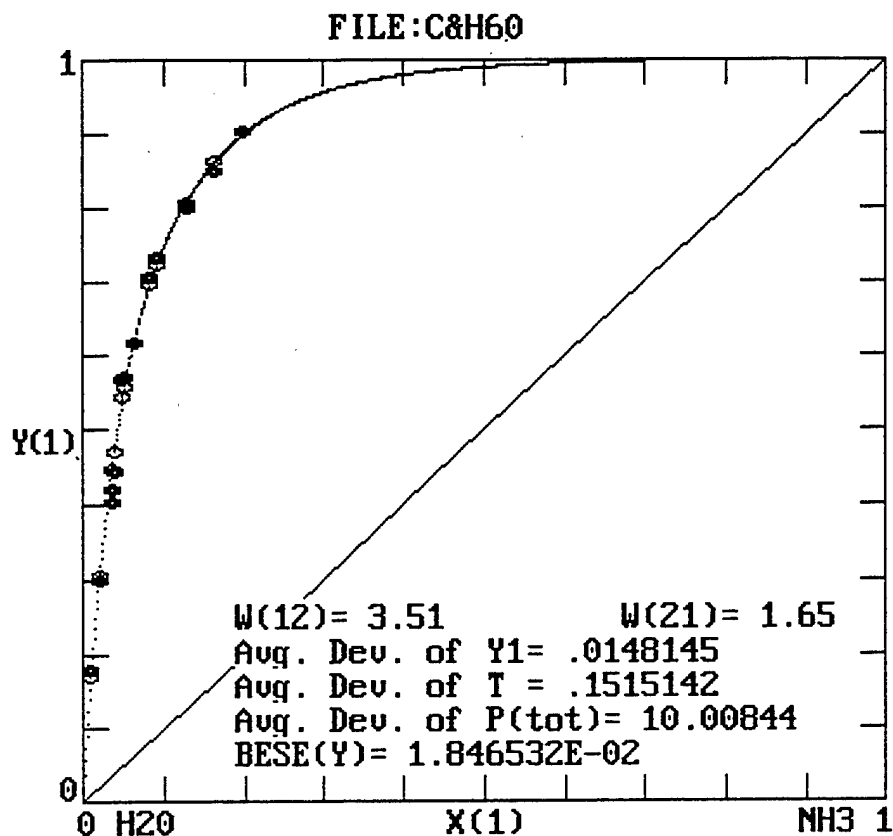
				f(S) Curved Fit Wijs				
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0900	1234.0	1336.2	8.30	0.6160	0.6433	90.0	90.0	859.6
0.1620	2091.0	2189.7	4.70	0.7960	0.8033	90.0	90.0	1758.9
0.3080	5404.0	4658.2	13.80	0.9350	0.9295	90.0	90.0	4329.9
0.3430	7180.0	5430.9	24.40	0.9534	0.9443	90.0	90.0	5128.4

W(12)= 4.184186 W(21)= 1.126931
 BESE(Y)= 0.0151 a.d.(Y1)= 0.0123
 a.d.ABS(Pt)= 673.9 a.d.REL(Pt)= 0.128
 R^2/N=0.00519 a.d.(T)= 0.09

FILE:WIL9A

				f(S) Linear Fit Wijs				
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0900	1234.0	1351.8	9.50	0.6160	0.6474	90.0	90.0	875.1
0.1620	2091.0	2215.7	6.00	0.7960	0.8054	90.0	90.0	1784.6
0.3080	5404.0	4697.9	13.10	0.9350	0.9300	90.0	90.0	4368.8
0.3430	7180.0	5472.1	23.80	0.9534	0.9445	90.0	90.0	5168.6

W(12)= 4.197008 W(21)= 1.101314
 BESE(Y)= 0.0172 a.d.(Y1)= 0.0137
 a.d.ABS(Pt)= 664.1 a.d.REL(Pt)= 0.131
 R^2/N=0.00540 a.d.(T)= 0.09



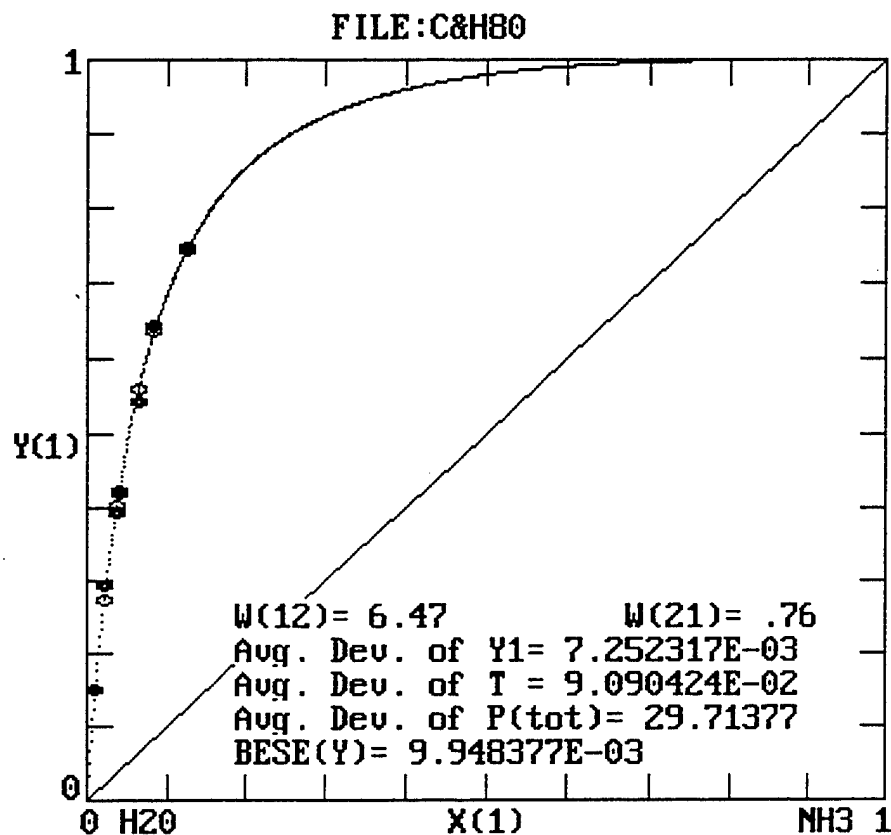
FILE:C&H60				Grid Search Wijs				
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0101	182.4	179.1	1.80	0.1802	0.1702	60.0	60.0	30.5
0.0208	217.4	211.8	2.60	0.2997	0.3064	60.0	60.0	64.9
0.0359	269.8	261.7	3.00	0.4216	0.4481	60.0	60.0	117.3
0.0359	269.8	261.7	3.00	0.4045	0.4481	60.0	60.0	117.3
0.0386	278.2	271.2	2.50	0.4448	0.4689	60.0	60.0	127.2
0.0495	316.2	310.6	1.70	0.5659	0.5424	60.0	60.0	168.5
0.0495	316.2	310.6	1.70	0.5669	0.5424	60.0	60.0	168.5
0.0521	326.8	320.4	1.90	0.5698	0.5578	60.0	60.0	178.7
0.0637	370.1	365.8	1.20	0.6154	0.6182	60.0	60.0	226.2
0.0832	443.8	448.8	1.10	0.7078	0.6967	60.0	60.0	312.7
0.0912	478.8	485.4	1.40	0.7341	0.7226	60.0	60.0	350.7
0.1260	639.9	662.4	3.50	0.8021	0.8068	60.0	60.0	534.5
0.1260	639.9	662.4	3.50	0.8011	0.8068	60.0	60.0	534.5
0.1613	839.0	874.0	4.20	0.8493	0.8617	60.0	60.0	753.2
0.1979	1102.8	1097.9	0.40	0.9049	0.9020	60.0	59.0	990.4
W(12)= 3.51				W(21)= 1.65				
BESE(Y)= 0.0185				a.d.(Y1)= 0.0148				
a.d.ABS(Pt)= 10.0				a.d.REL(Pt)= 0.022				
R^2/N=0.00150				a.d.(T)= 0.15				

FILE:C&H60

					f(S)	Curved Fit Wijs		
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0101	182.4	181.0	0.80	0.1802	0.1789	60.0	60.0	32.4
0.0208	217.4	215.2	1.00	0.2997	0.3172	60.0	60.0	68.3
0.0359	269.8	266.3	1.30	0.4216	0.4574	60.0	60.0	121.8
0.0359	269.8	266.3	1.30	0.4045	0.4574	60.0	60.0	121.8
0.0386	278.2	275.9	0.80	0.4448	0.4776	60.0	60.0	131.8
0.0495	316.2	315.4	0.30	0.5659	0.5487	60.0	60.0	173.0
0.0495	316.2	315.4	0.30	0.5669	0.5487	60.0	60.0	173.0
0.0521	326.8	325.0	0.50	0.5698	0.5635	60.0	60.0	183.2
0.0637	370.1	369.6	0.10	0.6154	0.6215	60.0	60.0	229.7
0.0832	443.8	449.6	1.30	0.7078	0.6963	60.0	60.0	313.0
0.0912	478.8	484.3	1.10	0.7341	0.7210	60.0	60.0	349.1
0.1260	639.9	648.7	1.40	0.8021	0.8015	60.0	60.0	519.9
0.1260	639.9	648.7	1.40	0.8011	0.8015	60.0	60.0	519.9
0.1613	839.0	839.8	0.10	0.8493	0.8547	60.0	60.0	717.8
0.1979	1102.8	1066.4	3.30	0.9049	0.8924	60.0	60.0	951.7
W(12)= 4.733871					W(21)= 1.281342			
BESE(Y)= 0.0211					a.d.(Y1)= 0.0154			
a.d.ABS(Pt)= 5.5					a.d.REL(Pt)= 0.010			
R^2/N=0.00203					a.d.(T)= 0.09			

FILE:C&H60

					f(S)	Linear Fit Wijs		
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0101	182.4	178.6	2.10	0.1802	0.1679	60.0	60.0	30.0
0.0208	217.4	210.3	3.20	0.2997	0.3013	60.0	60.0	63.4
0.0359	269.8	257.9	4.40	0.4216	0.4398	60.0	60.0	113.4
0.0359	269.8	257.9	4.40	0.4045	0.4398	60.0	60.0	113.4
0.0386	278.2	266.8	4.10	0.4448	0.4601	60.0	60.0	122.8
0.0495	316.2	303.9	3.90	0.5659	0.5318	60.0	60.0	161.6
0.0495	316.2	303.9	3.90	0.5669	0.5318	60.0	60.0	161.6
0.0521	326.8	313.0	4.20	0.5698	0.5469	60.0	60.0	171.2
0.0637	370.1	355.0	4.10	0.6154	0.6060	60.0	60.0	215.1
0.0832	443.8	430.8	2.90	0.7078	0.6833	60.0	60.0	294.3
0.0912	478.8	463.8	3.10	0.7341	0.7089	60.0	60.0	328.8
0.1260	639.9	621.3	2.90	0.8021	0.7931	60.0	60.0	492.8
0.1260	639.9	621.3	2.90	0.8011	0.7931	60.0	60.0	492.8
0.1613	839.0	806.0	3.90	0.8493	0.8490	60.0	60.0	684.3
0.1979	1102.8	1026.9	6.90	0.9049	0.8887	60.0	60.0	912.6
W(12)= 4.69074					W(21)= 1.369721			
BESE(Y)= 0.0210					a.d.(Y1)= 0.0178			
a.d.ABS(Pt)= 18.2					a.d.REL(Pt)= 0.038			
R^2/N=0.00307					a.d.(T)= 0.09			



FILE:C&H80				Grid Search Wijs				
$X_1(i)$	$Pt(i)$	$Pt(c)$	%dPt	$Y_1(i)$	$Y_1(c)$	$T(i)$	$T(c)$	$P_1(c)$
0.0101	415.0	415.9	0.20	0.1500	0.1511	80.0	80.0	62.8
0.0208	481.8	480.3	0.30	0.2935	0.2731	80.0	80.0	131.2
0.0359	578.4	574.4	0.70	0.3943	0.4018	80.0	80.0	230.8
0.0386	597.4	591.6	1.00	0.4247	0.4210	80.0	80.0	249.0
0.0637	782.8	757.7	3.20	0.5450	0.5605	80.0	80.0	424.7
0.0832	930.2	894.6	3.80	0.6440	0.6362	80.0	80.0	569.2
0.1250	1295.8	1213.3	6.40	0.7468	0.7457	80.0	80.0	904.8
0.1250	1295.8	1213.3	6.40	0.7448	0.7457	80.0	80.0	904.8
$W(12) = 6.47$				$W(21) = .76$				
$BESE(Y) = 0.0099$				a.d.(Y_1) = 0.0073				
a.d.ABS(Pt) = 29.7				a.d.REL(Pt) = 0.027				
$R^2/N = 0.00027$				a.d.(T) = 0.09				

FILE:C&H80

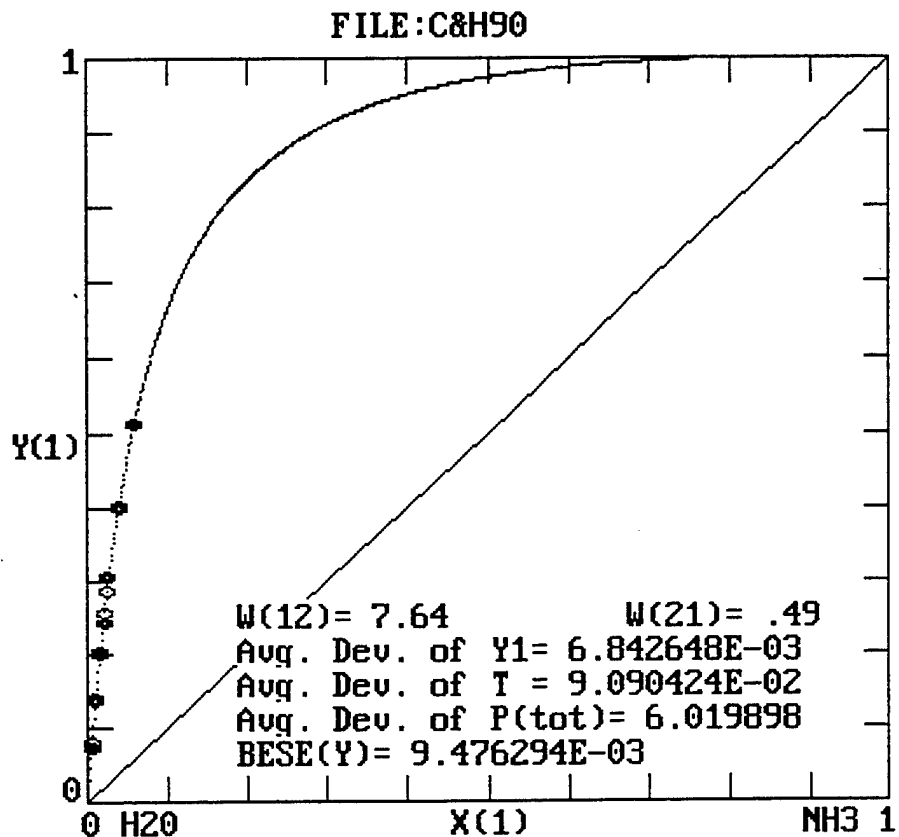
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0101	415.0	415.8	0.20	0.1500	0.1510	80.0	80.0	62.8
0.0208	481.8	481.1	0.20	0.2935	0.2743	80.0	80.0	131.9
0.0359	578.4	577.7	0.10	0.3943	0.4055	80.0	80.0	234.3
0.0386	597.4	595.6	0.30	0.4247	0.4251	80.0	80.0	253.2
0.0637	782.8	770.5	1.60	0.5450	0.5683	80.0	80.0	437.8
0.0832	930.2	917.8	1.30	0.6440	0.6461	80.0	80.0	593.0
0.1250	1295.8	1270.2	2.00	0.7468	0.7582	80.0	80.0	963.1
0.1250	1295.8	1270.2	2.00	0.7448	0.7582	80.0	80.0	963.1

W(12)= 4.390568 W(21)= 1.154137
 BESE(Y)= 0.0130 a.d.(Y1)= 0.0102
 a.d.ABS(Pt)= 10.0 a.d.REL(Pt)= 0.010
 R^2/N=0.00082 a.d.(T)= 0.09

FILE:C&H80

X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0101	415.0	414.5	0.10	0.1500	0.1484	80.0	80.0	61.5
0.0208	481.8	478.4	0.70	0.2935	0.2703	80.0	80.0	129.3
0.0359	578.4	573.2	0.90	0.3943	0.4009	80.0	80.0	229.8
0.0386	597.4	590.7	1.10	0.4247	0.4204	80.0	80.0	248.3
0.0637	782.8	762.6	2.60	0.5450	0.5639	80.0	80.0	430.0
0.0832	930.2	907.8	2.40	0.6440	0.6423	80.0	80.0	583.1
0.1250	1295.8	1255.7	3.10	0.7468	0.7555	80.0	80.0	948.7
0.1250	1295.8	1255.7	3.10	0.7448	0.7555	80.0	80.0	948.7

W(12)= 4.377883 W(21)= 1.178314
 BESE(Y)= 0.0120 a.d.(Y1)= 0.0095
 a.d.ABS(Pt)= 17.3 a.d.REL(Pt)= 0.017
 R^2/N=0.00057 a.d.(T)= 0.09



FILE:C&H90				Grid Search Wijs				
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0053	563.9	569.8	1.00	0.0727	0.0787	90.0	90.0	44.9
0.0101	605.7	608.3	0.40	0.1377	0.1412	90.0	90.0	85.9
0.0155	649.8	652.0	0.30	0.2009	0.2032	90.0	90.0	132.5
0.0208	696.2	695.4	0.10	0.2442	0.2571	90.0	90.0	178.8
0.0239	727.3	721.0	0.90	0.3058	0.2858	90.0	90.0	206.1
0.0391	854.2	849.0	0.60	0.4004	0.4032	90.0	90.0	342.3
0.0584	1036.6	1017.4	1.90	0.5121	0.5125	90.0	90.0	521.4
W(12)= 7.64				W(21)= .49				
BESE(Y)= 0.0095				a.d.(Y1)= 0.0068				
a.d.ABS(Pt)= 6.0				a.d.REL(Pt)= 0.007				
R^2/N=0.00014				a.d.(T)= 0.09				

FILE:C&H90

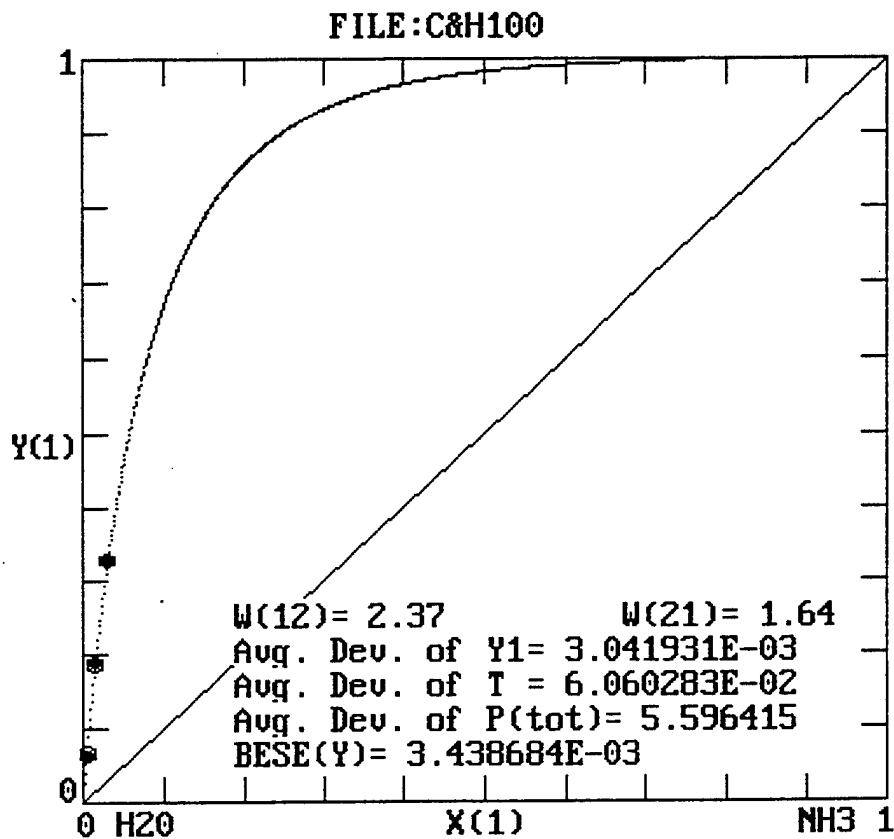
				f(S)		Curved Fit		Wijs
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0053	563.9	568.5	0.80	0.0727	0.0765	90.0	90.0	43.5
0.0101	605.7	606.0	0.00	0.1377	0.1380	90.0	90.0	83.6
0.0155	649.8	649.1	0.10	0.2009	0.1997	90.0	90.0	129.6
0.0208	696.2	692.1	0.60	0.2442	0.2537	90.0	90.0	175.6
0.0239	727.3	717.7	1.30	0.3058	0.2826	90.0	90.0	202.9
0.0391	854.2	847.4	0.80	0.4004	0.4024	90.0	90.0	341.0
0.0584	1036.6	1022.6	1.40	0.5121	0.5156	90.0	90.0	527.2

W(12)= 4.184186 W(21)= 1.126931
 BESE(Y)= 0.0097 a.d.(Y1)= 0.0062
 a.d.ABS(Pt)= 5.7 a.d.REL(Pt)= 0.007
 R^2/N=0.00016 a.d.(T)= 0.09

FILE:C&H90

				f(S)		Linear Fit		Wijs
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0053	563.9	569.4	1.00	0.0727	0.0781	90.0	90.0	44.5
0.0101	605.7	607.9	0.40	0.1377	0.1406	90.0	90.0	85.5
0.0155	649.8	651.9	0.30	0.2009	0.2032	90.0	90.0	132.4
0.0208	696.2	695.9	0.00	0.2442	0.2577	90.0	90.0	179.4
0.0239	727.3	722.1	0.70	0.3058	0.2870	90.0	90.0	207.2
0.0391	854.2	854.5	0.00	0.4004	0.4073	90.0	90.0	348.1
0.0584	1036.6	1033.2	0.30	0.5121	0.5204	90.0	90.1	537.7

W(12)= 4.197008 W(21)= 1.101314
 BESE(Y)= 0.0100 a.d.(Y1)= 0.0083
 a.d.ABS(Pt)= 2.7 a.d.REL(Pt)= 0.004
 R^2/N=0.00017 a.d.(T)= 0.09



FILE:C&H100

FILE:C&H100				Grid Search Wijs				
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0053	808.6	814.7	0.70	0.0647	0.0694	100.0	100.0	56.5
0.0155	915.8	920.2	0.50	0.1884	0.1848	100.0	100.0	170.0
0.0315	1089.1	1095.4	0.60	0.3283	0.3292	100.0	100.0	360.5

W(12)= 2.37 W(21)= 1.64
 BESE(Y)= 0.0034 a.d.(Y1)= 0.0030
 a.d.ABS(Pt)= 5.6 a.d.REL(Pt)= 0.006
 R²/N=0.00002 a.d.(T)= 0.06

FILE:C&H100

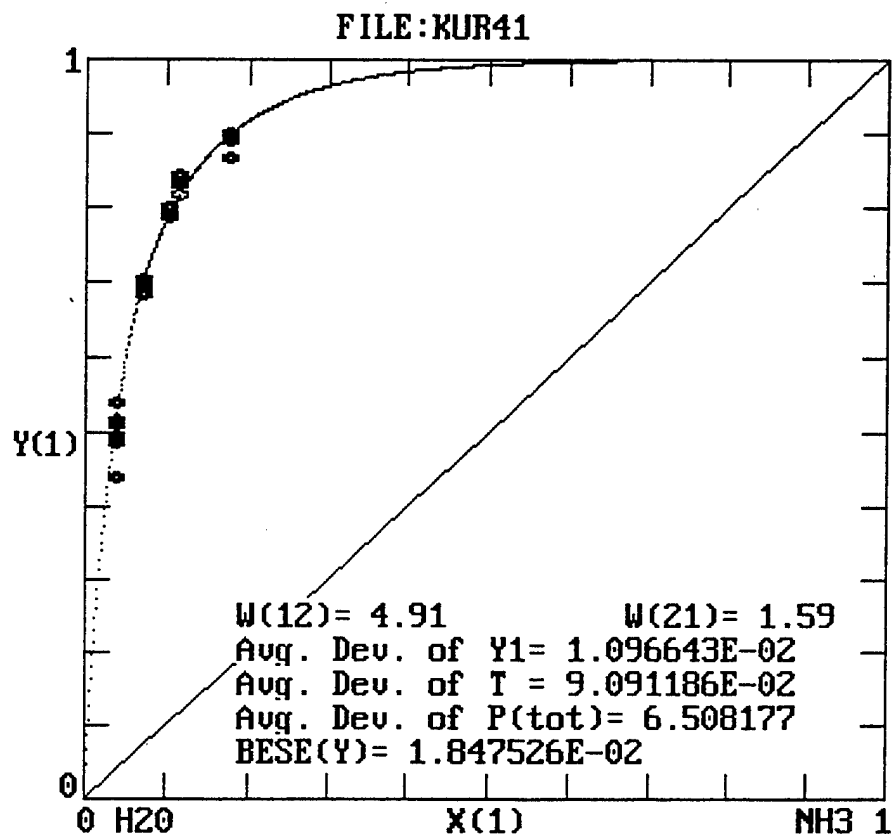
					f(S) Curved Fit Wijs			
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0053	808.6	814.7	0.70	0.0647	0.0693	100.0	100.0	56.5
0.0155	915.8	918.4	0.30	0.1884	0.1830	100.0	100.0	168.1
0.0315	1089.1	1085.9	0.30	0.3283	0.3230	100.0	100.0	350.7

W(12)= 3.945825 W(21)= 1.125348
 BESE(Y)= 0.0051 a.d.(Y1)= 0.0051
 a.d.ABS(Pt)= 3.9 a.d.REL(Pt)= 0.004
 R^2/N=0.00003 a.d.(T)= 0.06

FILE:C&H100

					f(S) Linear Fit Wijs			
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0053	808.6	819.1	1.30	0.0647	0.0743	100.0	100.0	60.9
0.0155	915.8	931.2	1.70	0.1884	0.1943	100.0	100.0	180.9
0.0315	1089.1	1081.5	0.70	0.3283	0.3419	100.0	99.0	369.7

W(12)= 3.989053 W(21)= 1.038263
 BESE(Y)= 0.0102 a.d.(Y1)= 0.0097
 a.d.ABS(Pt)= 11.1 a.d.REL(Pt)= 0.012
 R^2/N=0.00016 a.d.(T)= 0.36



FILE:KUR41				Grid Search Wijs				
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0386	112.5	110.4	1.90	0.4400	0.5169	40.0	40.0	57.1
0.0386	113.3	110.4	2.60	0.4901	0.5169	40.0	40.0	57.1
0.0386	114.0	110.4	3.20	0.4868	0.5169	40.0	40.0	57.1
0.0386	114.0	110.4	3.20	0.5395	0.5169	40.0	40.0	57.1
0.0386	113.3	110.4	2.60	0.4967	0.5169	40.0	40.0	57.1
0.0386	113.3	110.4	2.60	0.5099	0.5169	40.0	40.0	57.1
0.0386	113.3	110.4	2.60	0.5166	0.5169	40.0	40.0	57.1
0.0386	113.3	110.4	2.60	0.5099	0.5169	40.0	40.0	57.1
0.0719	174.8	168.6	3.60	0.6996	0.6964	40.0	40.0	117.4
0.0719	174.0	168.6	3.10	0.6940	0.6964	40.0	40.0	117.4
0.0719	172.5	168.6	2.30	0.6957	0.6964	40.0	40.0	117.4
0.0719	171.8	168.6	1.90	0.6943	0.6964	40.0	40.0	117.4
0.0719	171.0	168.6	1.40	0.6842	0.6964	40.0	40.0	117.4
0.0719	171.8	168.6	1.90	0.6943	0.6964	40.0	40.0	117.4
0.0719	171.0	168.6	1.40	0.7018	0.6964	40.0	40.0	117.4
0.1158	267.8	262.8	1.90	0.8431	0.8169	40.0	40.0	214.6
0.1159	267.8	263.0	1.80	0.8291	0.8171	40.0	40.0	214.9
0.1159	267.8	263.0	1.80	0.8319	0.8171	40.0	40.0	214.9
0.1159	267.8	263.0	1.80	0.8319	0.8171	40.0	40.0	214.9
0.1159	267.8	263.0	1.80	0.8319	0.8171	40.0	40.0	214.9
0.1022	235.5	231.3	1.80	0.7898	0.7878	40.0	40.0	182.2
0.1022	235.5	231.3	1.80	0.7898	0.7878	40.0	40.0	182.2
0.1022	236.3	231.3	2.10	0.7873	0.7878	40.0	40.0	182.2
0.1022	236.3	231.3	2.10	0.8000	0.7878	40.0	40.0	182.2
0.1022	236.3	231.3	2.10	0.7873	0.7878	40.0	40.0	182.2
0.1022	236.3	231.3	2.10	0.7873	0.7878	40.0	40.0	182.2
0.1022	236.3	231.3	2.10	0.7873	0.7878	40.0	40.0	182.2
0.1022	236.3	231.3	2.10	0.7905	0.7878	40.0	40.0	182.2
0.1756	445.5	428.1	3.90	0.8653	0.8981	40.0	40.0	384.5
0.1756	446.3	428.1	4.10	0.8891	0.8981	40.0	40.0	384.5
0.1756	446.3	428.1	4.10	0.8958	0.8981	40.0	40.0	384.5
0.1756	446.3	428.1	4.10	0.8975	0.8981	40.0	40.0	384.5
0.1756	446.3	428.1	4.10	0.9008	0.8981	40.0	40.0	384.5
0.1756	445.5	428.1	3.90	0.9007	0.8981	40.0	40.0	384.5

W(12)= 4.91 W(21)= 1.59
 BESE(Y)= 0.0185 a.d.(Y1)= 0.0110
 a.d.ABS(Pt)= 6.5 a.d.REL(Pt)= 0.025
 R^2/N=0.00369 a.d.(T)= 0.09

FILE:KUR41

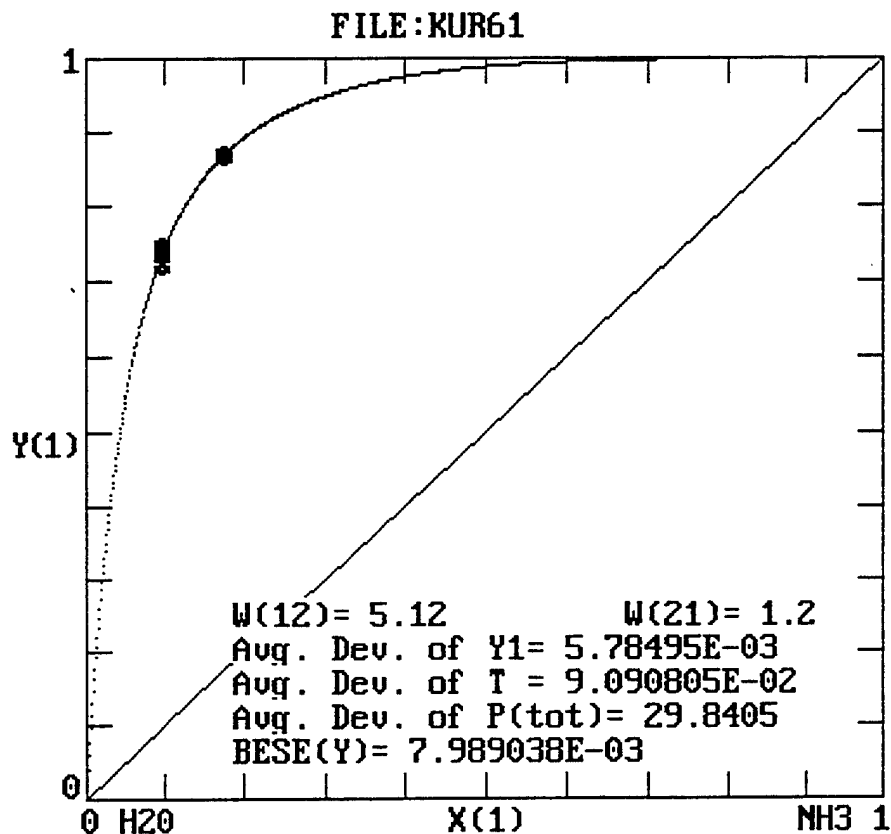
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0386	112.5	112.8	0.30	0.4400	0.5273	40.0	40.0	59.5
0.0386	113.3	112.8	0.40	0.4901	0.5273	40.0	40.0	59.5
0.0386	114.0	112.8	1.00	0.4868	0.5273	40.0	40.0	59.5
0.0386	114.0	112.8	1.00	0.5395	0.5273	40.0	40.0	59.5
0.0386	113.3	112.8	0.40	0.4967	0.5273	40.0	40.0	59.5
0.0386	113.3	112.8	0.40	0.5099	0.5273	40.0	40.0	59.5
0.0386	113.3	112.8	0.40	0.5166	0.5273	40.0	40.0	59.5
0.0386	113.3	112.8	0.40	0.5099	0.5273	40.0	40.0	59.5
0.0719	174.8	172.9	1.10	0.6996	0.7038	40.0	40.0	121.6
0.0719	174.0	172.9	0.70	0.6940	0.7038	40.0	40.0	121.6
0.0719	172.5	172.9	0.20	0.6957	0.7038	40.0	40.0	121.6
0.0719	171.8	172.9	0.60	0.6943	0.7038	40.0	40.0	121.6
0.0719	171.0	172.9	1.10	0.6842	0.7038	40.0	40.0	121.6
0.0719	171.8	172.9	0.60	0.6943	0.7038	40.0	40.0	121.6
0.0719	171.0	172.9	1.10	0.7018	0.7038	40.0	40.0	121.6
0.1158	267.8	269.1	0.50	0.8431	0.8210	40.0	40.0	220.9
0.1159	267.8	269.3	0.60	0.8291	0.8212	40.0	40.0	221.2
0.1159	267.8	269.3	0.60	0.8319	0.8212	40.0	40.0	221.2
0.1159	267.8	269.3	0.60	0.8319	0.8212	40.0	40.0	221.2
0.1159	267.8	269.3	0.60	0.8319	0.8212	40.0	40.0	221.2
0.1022	235.5	237.1	0.70	0.7898	0.7927	40.0	40.0	187.9
0.1022	235.5	237.1	0.70	0.7898	0.7927	40.0	40.0	187.9
0.1022	236.3	237.1	0.30	0.7873	0.7927	40.0	40.0	187.9
0.1022	236.3	237.1	0.30	0.8000	0.7927	40.0	40.0	187.9
0.1022	236.3	237.1	0.30	0.7873	0.7927	40.0	40.0	187.9
0.1022	236.3	237.1	0.30	0.7873	0.7927	40.0	40.0	187.9
0.1022	236.3	237.1	0.30	0.7873	0.7927	40.0	40.0	187.9
0.1022	236.3	237.1	0.30	0.7905	0.7927	40.0	40.0	187.9
0.1756	445.5	436.3	2.10	0.8653	0.8998	40.0	40.0	392.5
0.1756	446.3	436.3	2.20	0.8891	0.8998	40.0	40.0	392.5
0.1756	446.3	436.3	2.20	0.8958	0.8998	40.0	40.0	392.5
0.1756	446.3	436.3	2.20	0.8975	0.8998	40.0	40.0	392.5
0.1756	446.3	436.3	2.20	0.9008	0.8998	40.0	40.0	392.5
0.1756	445.5	436.3	2.10	0.9007	0.8998	40.0	40.0	392.5

W(12)= 5.006386 W(21)= 1.521475
 BESE(Y)= 0.0214 a.d.(Y1)= 0.0138
 a.d.ABS(Pt)= 2.6 a.d.REL(Pt)= 0.009
 R^2/N=0.00408 a.d.(T)= 0.09

FILE:KUR41

X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	Pl(c)
0.0386	112.5	108.7	3.40	0.4400	0.5094	40.0	40.0	55.4
0.0386	113.3	108.7	4.10	0.4901	0.5094	40.0	40.0	55.4
0.0386	114.0	108.7	4.70	0.4868	0.5094	40.0	40.0	55.4
0.0386	114.0	108.7	4.70	0.5395	0.5094	40.0	40.0	55.4
0.0386	113.3	108.7	4.10	0.4967	0.5094	40.0	40.0	55.4
0.0386	113.3	108.7	4.10	0.5099	0.5094	40.0	40.0	55.4
0.0386	113.3	108.7	4.10	0.5166	0.5094	40.0	40.0	55.4
0.0386	113.3	108.7	4.10	0.5099	0.5094	40.0	40.0	55.4
0.0719	174.8	165.3	5.40	0.6996	0.6905	40.0	40.0	114.1
0.0719	174.0	165.3	5.00	0.6940	0.6905	40.0	40.0	114.1
0.0719	172.5	165.3	4.20	0.6957	0.6905	40.0	40.0	114.1
0.0719	171.8	165.3	3.80	0.6943	0.6905	40.0	40.0	114.1
0.0719	171.0	165.3	3.30	0.6842	0.6905	40.0	40.0	114.1
0.0719	171.8	165.3	3.80	0.6943	0.6905	40.0	40.0	114.1
0.0719	171.0	165.3	3.30	0.7018	0.6905	40.0	40.0	114.1
0.1158	267.8	257.3	3.90	0.8431	0.8131	40.0	40.0	209.2
0.1159	267.8	257.6	3.80	0.8291	0.8133	40.0	40.0	209.5
0.1159	267.8	257.6	3.80	0.8319	0.8133	40.0	40.0	209.5
0.1159	267.8	257.6	3.80	0.8319	0.8133	40.0	40.0	209.5
0.1159	267.8	257.6	3.80	0.8319	0.8133	40.0	40.0	209.5
0.1022	235.5	226.6	3.80	0.7898	0.7834	40.0	40.0	177.5
0.1022	235.5	226.6	3.80	0.7898	0.7834	40.0	40.0	177.5
0.1022	236.3	226.6	4.10	0.7873	0.7834	40.0	40.0	177.5
0.1022	236.3	226.6	4.10	0.8000	0.7834	40.0	40.0	177.5
0.1022	236.3	226.6	4.10	0.7873	0.7834	40.0	40.0	177.5
0.1022	236.3	226.6	4.10	0.7873	0.7834	40.0	40.0	177.5
0.1022	236.3	226.6	4.10	0.7873	0.7834	40.0	40.0	177.5
0.1022	236.3	226.6	4.10	0.7873	0.7834	40.0	40.0	177.5
0.1022	236.3	226.6	4.10	0.7905	0.7834	40.0	40.0	177.5
0.1756	445.5	419.5	5.80	0.8653	0.8961	40.0	40.0	375.9
0.1756	446.3	419.5	6.00	0.8891	0.8961	40.0	40.0	375.9
0.1756	446.3	419.5	6.00	0.8958	0.8961	40.0	40.0	375.9
0.1756	446.3	419.5	6.00	0.8975	0.8961	40.0	40.0	375.9
0.1756	446.3	419.5	6.00	0.9008	0.8961	40.0	40.0	375.9
0.1756	445.5	419.5	5.80	0.9007	0.8961	40.0	40.0	375.9

W(12)= 4.967086 W(21)= 1.611268
 BESE(Y)= 0.0179 a.d.(Y1)= 0.0120
 a.d.ABS(Pt)= 11.0 a.d.REL(Pt)= 0.044
 R^2/N=0.00396 a.d.(T)= 0.09



FILE:KUR61				Grid Search Wijs				
$X1(i)$	$Pt(i)$	$Pt(c)$	%dPt	$Y1(i)$	$Y1(c)$	$T(i)$	$T(c)$	$P1(c)$
0.0979	510.0	509.8	0.00	0.7162	0.7371	60.0	60.0	375.8
0.0980	511.5	510.2	0.20	0.7302	0.7373	60.0	60.0	376.2
0.0979	513.0	509.8	0.60	0.7354	0.7371	60.0	60.0	375.8
0.0979	514.5	509.8	0.90	0.7362	0.7371	60.0	60.0	375.8
0.0979	513.0	509.8	0.60	0.7485	0.7371	60.0	60.0	375.8
0.0979	513.0	509.8	0.60	0.7442	0.7371	60.0	60.0	375.8
0.0979	513.0	509.8	0.60	0.7485	0.7371	60.0	60.0	375.8
0.1767	971.3	914.6	5.80	0.8618	0.8696	60.0	60.0	795.3
0.1767	972.1	914.6	5.90	0.8673	0.8696	60.0	60.0	795.3
0.1767	972.1	914.6	5.90	0.8704	0.8696	60.0	60.0	795.3
0.1767	972.1	914.6	5.90	0.8711	0.8696	60.0	60.0	795.3
0.1767	971.3	914.6	5.80	0.8726	0.8696	60.0	60.0	795.3
0.1767	971.3	914.6	5.80	0.8726	0.8696	60.0	60.0	795.3
0.1767	970.6	914.6	5.80	0.8717	0.8696	60.0	60.0	795.3
$W(12) = 5.12$				$W(21) = 1.2$				
$BESE(Y) = 0.0080$				a.d.(Y1) = 0.0058				
a.d.ABS(Pt) = 29.8				a.d.REL(Pt) = 0.032				
$R^2/N = 0.00084$				a.d.(T) = 0.09				

FILE:KUR61

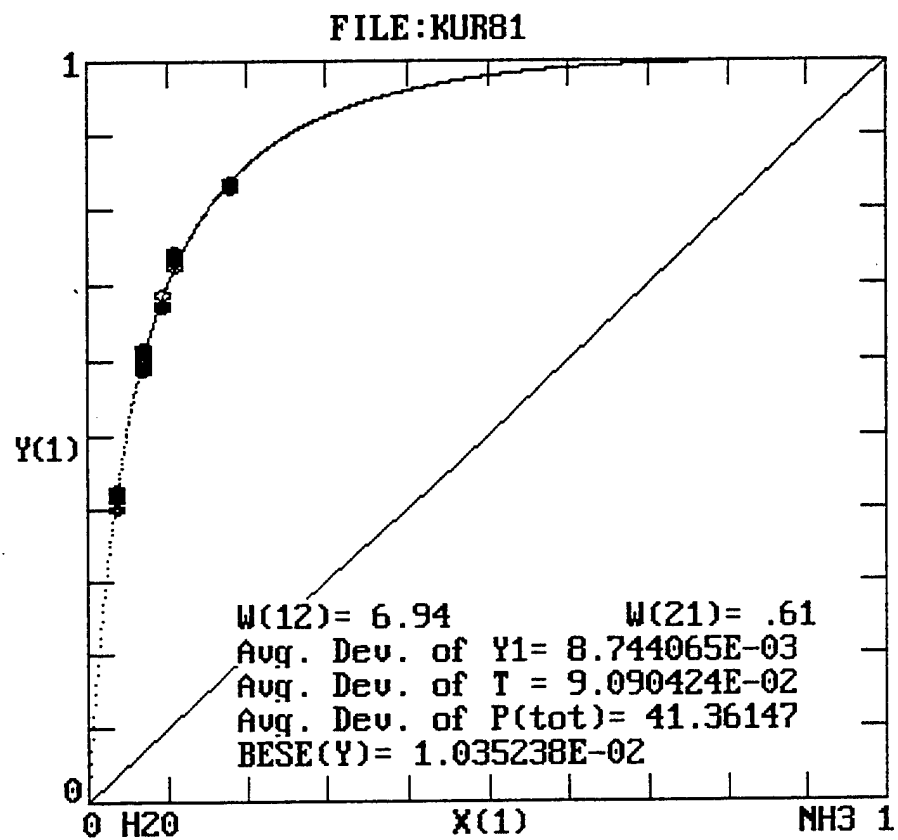
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0979	510.0	514.2	0.80	0.7162	0.7395	60.0	60.0	380.2
0.0980	511.5	514.6	0.60	0.7302	0.7398	60.0	60.0	380.7
0.0979	513.0	514.2	0.20	0.7354	0.7395	60.0	60.0	380.2
0.0979	514.5	514.2	0.10	0.7362	0.7395	60.0	60.0	380.2
0.0979	513.0	514.2	0.20	0.7485	0.7395	60.0	60.0	380.2
0.0979	513.0	514.2	0.20	0.7442	0.7395	60.0	60.0	380.2
0.0979	513.0	514.2	0.20	0.7485	0.7395	60.0	60.0	380.2
0.1767	971.3	931.4	4.10	0.8618	0.8723	60.0	60.0	812.4
0.1767	972.1	931.4	4.20	0.8673	0.8723	60.0	60.0	812.4
0.1767	972.1	931.4	4.20	0.8704	0.8723	60.0	60.0	812.4
0.1767	972.1	931.4	4.20	0.8711	0.8723	60.0	60.0	812.4
0.1767	971.3	931.4	4.10	0.8726	0.8723	60.0	60.0	812.4
0.1767	971.3	931.4	4.10	0.8726	0.8723	60.0	60.0	812.4
0.1767	970.6	931.4	4.00	0.8717	0.8723	60.0	60.0	812.4

W(12)= 4.733871 W(21)= 1.281342
 BESE(Y)= 0.0084 a.d.(Y1)= 0.0059
 a.d.ABS(Pt)= 20.9 a.d.REL(Pt)= 0.022
 R^2/N=0.00100 a.d.(T)= 0.09

FILE:KUR61

X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0979	510.0	492.3	3.50	0.7162	0.7282	60.0	60.0	358.5
0.0980	511.5	492.8	3.70	0.7302	0.7285	60.0	60.0	359.0
0.0979	513.0	492.3	4.00	0.7354	0.7282	60.0	60.0	358.5
0.0979	514.5	492.3	4.30	0.7362	0.7282	60.0	60.0	358.5
0.0979	513.0	492.3	4.00	0.7485	0.7282	60.0	60.0	358.5
0.0979	513.0	492.3	4.00	0.7442	0.7282	60.0	60.0	358.5
0.0979	513.0	492.3	4.00	0.7485	0.7282	60.0	60.0	358.5
0.1767	971.3	895.1	7.80	0.8618	0.8675	60.0	60.0	776.5
0.1767	972.1	895.1	7.90	0.8673	0.8675	60.0	60.0	776.5
0.1767	972.1	895.1	7.90	0.8704	0.8675	60.0	60.0	776.5
0.1767	972.1	895.1	7.90	0.8711	0.8675	60.0	60.0	776.5
0.1767	971.3	895.1	7.80	0.8726	0.8675	60.0	60.0	776.5
0.1767	971.3	895.1	7.80	0.8726	0.8675	60.0	60.0	776.5
0.1767	970.6	895.1	7.80	0.8717	0.8675	60.0	60.0	776.5

W(12)= 4.69074 W(21)= 1.369721
 BESE(Y)= 0.0102 a.d.(Y1)= 0.0080
 a.d.ABS(Pt)= 48.3 a.d.REL(Pt)= 0.059
 R^2/N=0.00135 a.d.(T)= 0.09



```

FILE:KUR81
Grid Search Wijs
X1(i)  Pt(i)  Pt(c)  %dPt  Y1(i)  Y1(c)  T(i)  T(c)  P1(c)
0.0359  577.5  590.1  2.20  0.4000  0.4200  79.9  79.9  247.8
0.0359  576.0  590.1  2.40  0.4154  0.4200  79.9  79.9  247.8
0.0359  576.0  590.1  2.40  0.4141  0.4200  79.9  79.9  247.8
0.0359  575.3  590.1  2.60  0.4185  0.4200  79.9  79.9  247.8
0.0359  575.3  590.1  2.60  0.4263  0.4200  79.9  79.9  247.8
0.0359  575.3  590.1  2.60  0.4250  0.4200  79.9  79.9  247.8
0.0689  810.8  823.5  1.60  0.5883  0.5995  79.9  79.9  493.6
0.0689  810.8  823.5  1.60  0.5874  0.5995  79.9  79.9  493.6
0.0689  810.8  823.5  1.60  0.5902  0.5995  79.9  79.9  493.6
0.0689  810.8  823.5  1.60  0.5883  0.5995  79.9  79.9  493.6
0.0689  810.8  823.5  1.60  0.5939  0.5995  79.9  79.9  493.6
0.0689  810.8  823.5  1.60  0.5920  0.5995  79.9  79.9  493.6
0.0688  810.8  822.7  1.50  0.6004  0.5990  79.9  79.9  492.9
0.0688  810.8  822.7  1.50  0.6022  0.5990  79.9  79.9  492.9
0.0688  810.8  822.7  1.50  0.6050  0.5990  79.9  79.9  492.9
0.0688  810.8  822.7  1.50  0.6142  0.5990  79.9  79.9  492.9
0.0688  810.8  822.7  1.50  0.6078  0.5990  79.9  79.9  492.9
0.0688  810.8  822.7  1.50  0.6087  0.5990  79.9  79.9  492.9
0.0688  810.8  822.7  1.50  0.6161  0.5990  79.9  79.9  492.9
0.0688  810.8  822.7  1.50  0.6087  0.5990  79.9  79.9  492.9
0.0949  1043.3  1020.3  2.20  0.6729  0.6866  79.9  79.9  700.6
0.0949  1042.6  1020.3  2.10  0.6705  0.6866  79.9  79.9  700.6
0.0949  1041.8  1020.3  2.10  0.6739  0.6866  79.9  79.9  700.6
0.0949  1041.8  1020.3  2.10  0.6724  0.6866  79.9  79.9  700.6
0.1096  1162.6  1137.1  2.20  0.7284  0.7239  79.9  79.9  823.1
0.1096  1161.8  1137.1  2.10  0.7379  0.7239  79.9  79.9  823.1
0.1096  1160.3  1137.1  2.00  0.7427  0.7239  79.9  79.9  823.1
0.1096  1160.3  1137.1  2.00  0.7395  0.7239  79.9  79.9  823.1
0.1775  1893.2  1732.8  8.50  0.8261  0.8349  79.9  79.9  1446.8
0.1775  1893.2  1732.8  8.50  0.8316  0.8349  79.9  79.9  1446.8
0.1775  1893.9  1732.8  8.50  0.8349  0.8349  79.9  79.9  1446.8
0.1775  1893.9  1732.8  8.50  0.8368  0.8349  79.9  79.9  1446.8
0.1775  1893.9  1732.8  8.50  0.8352  0.8349  79.9  79.9  1446.8
0.1775  1893.9  1732.8  8.50  0.8376  0.8349  79.9  79.9  1446.8
W(12)= 6.94      W(21)= .61
BESE(Y)= 0.0104   a.d.(Y1)= 0.0087
a.d.ABS(Pt)= 41.4 a.d.REL(Pt)= 0.030
R^2/N=0.00072     a.d.(T)= 0.09

```

FILE:KUR81

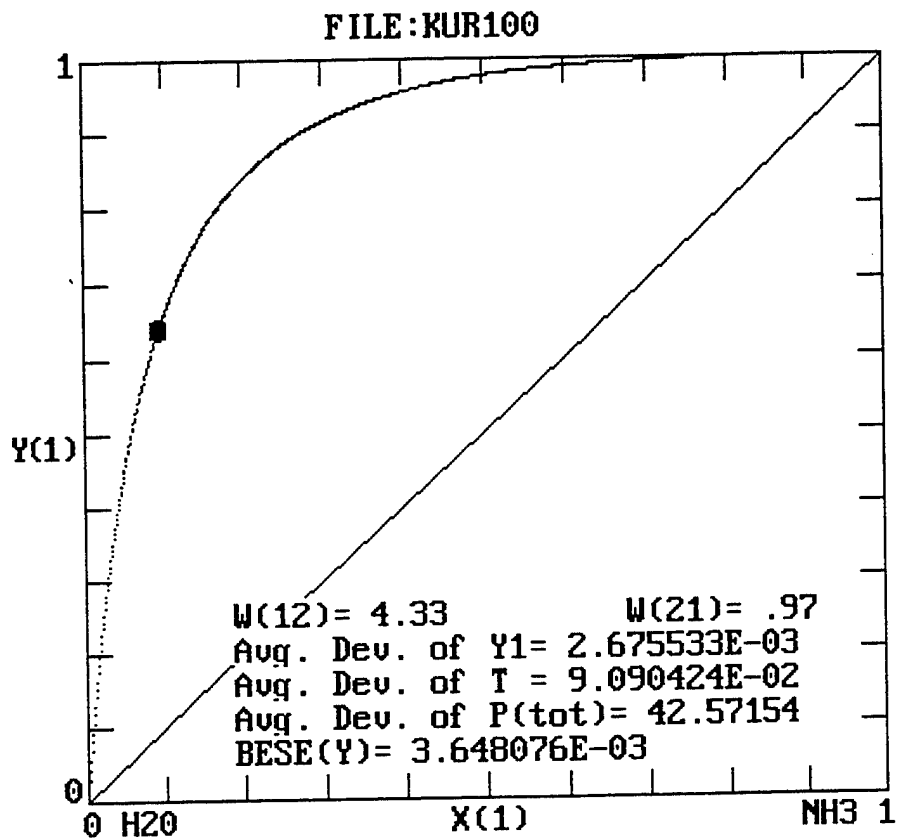
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	f(S)	Curved Fit	Wijs
						T(i)	T(c)	P1(c)
0.0359	577.5	575.6	0.30	0.4000	0.4058	79.9	79.9	233.6
0.0359	576.0	575.6	0.10	0.4154	0.4058	79.9	79.9	233.6
0.0359	576.0	575.6	0.10	0.4141	0.4058	79.9	79.9	233.6
0.0359	575.3	575.6	0.10	0.4185	0.4058	79.9	79.9	233.6
0.0359	575.3	575.6	0.10	0.4263	0.4058	79.9	79.9	233.6
0.0359	575.3	575.6	0.10	0.4250	0.4058	79.9	79.9	233.6
0.0689	810.8	806.0	0.60	0.5883	0.5915	79.9	79.9	476.8
0.0689	810.8	806.0	0.60	0.5874	0.5915	79.9	79.9	476.8
0.0689	810.8	806.0	0.60	0.5902	0.5915	79.9	79.9	476.8
0.0689	810.8	806.0	0.60	0.5883	0.5915	79.9	79.9	476.8
0.0689	810.8	806.0	0.60	0.5939	0.5915	79.9	79.9	476.8
0.0689	810.8	806.0	0.60	0.5920	0.5915	79.9	79.9	476.8
0.0688	810.8	805.3	0.70	0.6004	0.5911	79.9	79.9	476.0
0.0688	810.8	805.3	0.70	0.6022	0.5911	79.9	79.9	476.0
0.0688	810.8	805.3	0.70	0.6050	0.5911	79.9	79.9	476.0
0.0688	810.8	805.3	0.70	0.6142	0.5911	79.9	79.9	476.0
0.0688	810.8	805.3	0.70	0.6078	0.5911	79.9	79.9	476.0
0.0688	810.8	805.3	0.70	0.6087	0.5911	79.9	79.9	476.0
0.0688	810.8	805.3	0.70	0.6161	0.5911	79.9	79.9	476.0
0.0688	810.8	805.3	0.70	0.6087	0.5911	79.9	79.9	476.0
0.0949	1043.3	1008.0	3.40	0.6729	0.6839	79.9	79.9	689.3
0.0949	1042.6	1008.0	3.30	0.6705	0.6839	79.9	79.9	689.3
0.0949	1041.8	1008.0	3.20	0.6739	0.6839	79.9	79.9	689.3
0.0949	1041.8	1008.0	3.20	0.6724	0.6839	79.9	79.9	689.3
0.1096	1162.6	1130.7	2.70	0.7284	0.7236	79.9	79.9	818.2
0.1096	1161.8	1130.7	2.70	0.7379	0.7236	79.9	79.9	818.2
0.1096	1160.3	1130.7	2.60	0.7427	0.7236	79.9	79.9	818.2
0.1096	1160.3	1130.7	2.60	0.7395	0.7236	79.9	79.9	818.2
0.1775	1893.2	1785.7	5.70	0.8261	0.8417	79.9	79.9	1503.1
0.1775	1893.2	1785.7	5.70	0.8316	0.8417	79.9	79.9	1503.1
0.1775	1893.9	1785.7	5.70	0.8349	0.8417	79.9	79.9	1503.1
0.1775	1893.9	1785.7	5.70	0.8368	0.8417	79.9	79.9	1503.1
0.1775	1893.9	1785.7	5.70	0.8352	0.8417	79.9	79.9	1503.1
0.1775	1893.9	1785.7	5.70	0.8376	0.8417	79.9	79.9	1503.1

W(12)= 4.392502 W(21)= 1.154531
 BESE(Y)= 0.0127 a.d.(Y1)= 0.0110
 a.d.ABS(Pt)= 28.9 a.d.REL(Pt)= 0.020
 R^2/N=0.00113 a.d.(T)= 0.09

```

FILE:KUR81
f(S) Linear Fit Wijs
X1(i) Pt(i) Pt(c) %dPt Y1(i) Y1(c) T(i) T(c) P1(c)
0.0359 577.5 571.1 1.10 0.4000 0.4010 79.9 79.9 229.0
0.0359 576.0 571.1 0.90 0.4154 0.4010 79.9 79.9 229.0
0.0359 576.0 571.1 0.90 0.4141 0.4010 79.9 79.9 229.0
0.0359 575.3 571.1 0.70 0.4185 0.4010 79.9 79.9 229.0
0.0359 575.3 571.1 0.70 0.4263 0.4010 79.9 79.9 229.0
0.0359 575.3 571.1 0.70 0.4250 0.4010 79.9 79.9 229.0
0.0689 810.8 797.5 1.60 0.5883 0.5872 79.9 79.9 468.3
0.0689 810.8 797.5 1.60 0.5874 0.5872 79.9 79.9 468.3
0.0689 810.8 797.5 1.60 0.5902 0.5872 79.9 79.9 468.3
0.0689 810.8 797.5 1.60 0.5883 0.5872 79.9 79.9 468.3
0.0689 810.8 797.5 1.60 0.5939 0.5872 79.9 79.9 468.3
0.0689 810.8 797.5 1.60 0.5920 0.5872 79.9 79.9 468.3
0.0688 810.8 796.7 1.70 0.6004 0.5868 79.9 79.9 467.5
0.0688 810.8 796.7 1.70 0.6022 0.5868 79.9 79.9 467.5
0.0688 810.8 796.7 1.70 0.6050 0.5868 79.9 79.9 467.5
0.0688 810.8 796.7 1.70 0.6142 0.5868 79.9 79.9 467.5
0.0688 810.8 796.7 1.70 0.6078 0.5868 79.9 79.9 467.5
0.0688 810.8 796.7 1.70 0.6087 0.5868 79.9 79.9 467.5
0.0688 810.8 796.7 1.70 0.6161 0.5868 79.9 79.9 467.5
0.0688 810.8 796.7 1.70 0.6087 0.5868 79.9 79.9 467.5
0.0949 1043.3 996.5 4.50 0.6729 0.6803 79.9 79.9 677.9
0.0949 1042.6 996.5 4.40 0.6705 0.6803 79.9 79.9 677.9
0.0949 1041.8 996.5 4.40 0.6739 0.6803 79.9 79.9 677.9
0.0949 1041.8 996.5 4.40 0.6724 0.6803 79.9 79.9 677.9
0.1096 1162.6 1117.6 3.90 0.7284 0.7205 79.9 79.9 805.2
0.1096 1161.8 1117.6 3.80 0.7379 0.7205 79.9 79.9 805.2
0.1096 1160.3 1117.6 3.70 0.7427 0.7205 79.9 79.9 805.2
0.1096 1160.3 1117.6 3.70 0.7395 0.7205 79.9 79.9 805.2
0.1775 1893.2 1766.0 6.70 0.8261 0.8401 79.9 79.9 1483.6
0.1775 1893.2 1766.0 6.70 0.8316 0.8401 79.9 79.9 1483.6
0.1775 1893.9 1766.0 6.80 0.8349 0.8401 79.9 79.9 1483.6
0.1775 1893.9 1766.0 6.80 0.8368 0.8401 79.9 79.9 1483.6
0.1775 1893.9 1766.0 6.80 0.8352 0.8401 79.9 79.9 1483.6
0.1775 1893.9 1766.0 6.80 0.8376 0.8401 79.9 79.9 1483.6
W(12)= 4.379589 W(21)= 1.179149
BESE(Y)= 0.0149 a.d.(Y1)= 0.0123
a.d.ABS(Pt)= 39.6 a.d.REL(Pt)= 0.030
R^2/N=0.00132 a.d.(T)= 0.09

```



FILE:KUR100					Grid Search Wijs				
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)	
0.0948	1978.7	1936.1	2.20	0.6406	0.6398	100.5	100.5	1238.8	
0.0948	1978.7	1936.1	2.20	0.6338	0.6398	100.5	100.5	1238.8	
0.0948	1978.7	1936.1	2.20	0.6403	0.6398	100.5	100.5	1238.8	
0.0948	1978.7	1936.1	2.20	0.6452	0.6398	100.5	100.5	1238.8	
0.0948	1978.7	1936.1	2.20	0.6391	0.6398	100.5	100.5	1238.8	
W(12)= 4.33				W(21)= .97					
BESE(Y)= 0.0036				a.d.(Y1)= 0.0027					
a.d.ABS(Pt)= 42.6				a.d.REL(Pt)= 0.022					
R^2/N=0.00007				a.d.(T)= 0.09					

FILE:KUR100

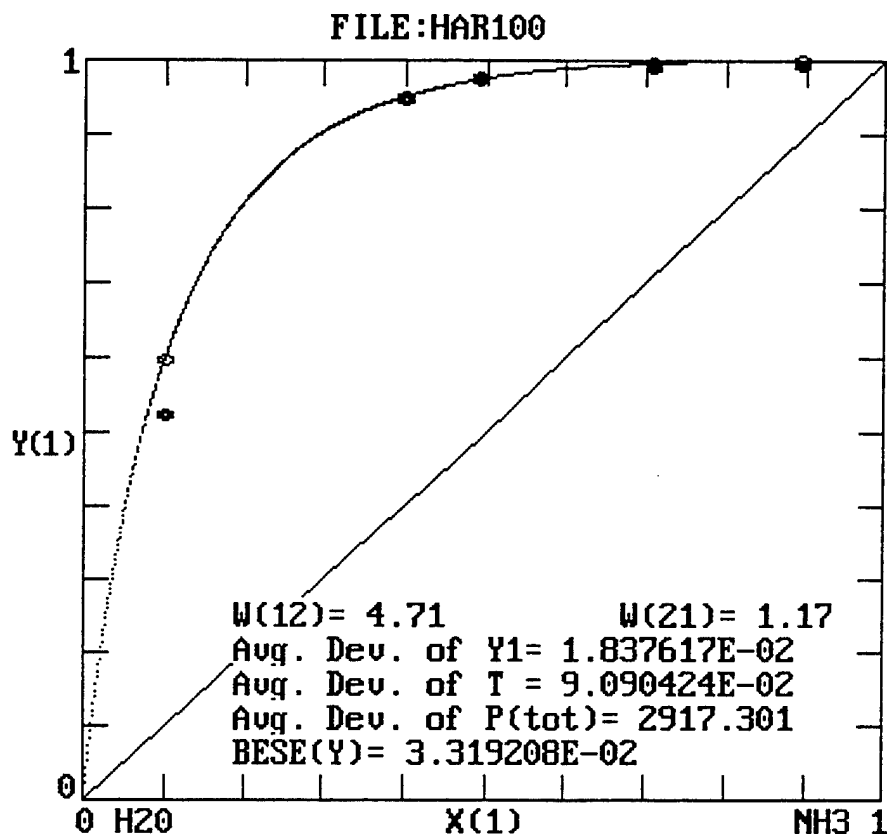
					f(S) Curved Fit Wijs			
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0948	1978.7	1892.4	4.40	0.6406	0.6320	100.5	100.5	1195.9
0.0948	1978.7	1892.4	4.40	0.6338	0.6320	100.5	100.5	1195.9
0.0948	1978.7	1892.4	4.40	0.6403	0.6320	100.5	100.5	1195.9
0.0948	1978.7	1892.4	4.40	0.6452	0.6320	100.5	100.5	1195.9
0.0948	1978.7	1892.4	4.40	0.6391	0.6320	100.5	100.5	1195.9

W(12)= 3.932855 W(21)= 1.126026
 BESE(Y)= 0.0087 a.d.(Y1)= 0.0078
 a.d.ABS(Pt)= 86.3 a.d.REL(Pt)= 0.044
 R^2/N=0.00041 a.d.(T)= 0.09

FILE:KUR100

					f(S) Linear Fit Wijs			
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0948	1978.7	1970.3	0.40	0.6406	0.6461	100.5	100.6	1273.0
0.0948	1978.7	1970.3	0.40	0.6338	0.6461	100.5	100.6	1273.0
0.0948	1978.7	1970.3	0.40	0.6403	0.6461	100.5	100.6	1273.0
0.0948	1978.7	1970.3	0.40	0.6452	0.6461	100.5	100.6	1273.0
0.0948	1978.7	1970.3	0.40	0.6391	0.6461	100.5	100.6	1273.0

W(12)= 3.977698 W(21)= 1.035527
 BESE(Y)= 0.0073 a.d.(Y1)= 0.0063
 a.d.ABS(Pt)= 8.4 a.d.REL(Pt)= 0.004
 R^2/N=0.00023 a.d.(T)= 0.10



FILE:HAR100

					Grid Search Wijs			
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0987	1972.8	1689.9	14.30	0.5240	0.5975	100.0	100.0	1009.7
0.3994	10775.0	7634.3	29.10	0.9470	0.9514	100.0	100.0	7263.5
0.4900	15905.0	10853.8	31.80	0.9762	0.9747	100.0	100.0	10579.5
0.7081	28180.0	22975.6	18.50	0.9906	0.9963	100.0	100.0	22891.8
0.8934	39775.0	38867.7	2.30	0.9931	0.9998	100.0	100.0	38859.2

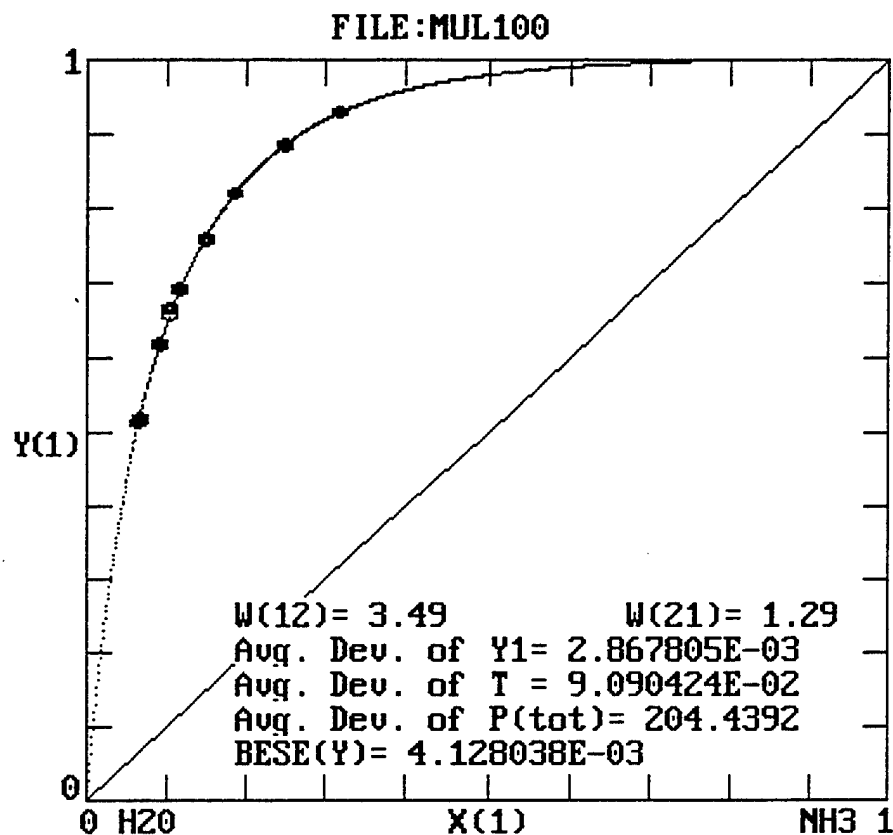
W(12)= 4.71 W(21)= 1.17
 BESE(Y)= 0.0332 a.d.(Y1)= 0.0184
 a.d.ABS(Pt)=2917.3 a.d.REL(Pt)= 0.192
 R^2/N=0.04540 a.d.(T)= 0.09

FILE:HAR100

				f(S) Curved Fit Wijs				
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0987	1972.8	1918.5	2.80	0.5240	0.6451	100.0	100.0	1237.7
0.3994	10775.0	8794.1	18.40	0.9470	0.9569	100.0	100.0	8415.5
0.4900	15905.0	12313.9	22.60	0.9762	0.9769	100.0	100.0	12029.6
0.7081	28180.0	24784.3	12.10	0.9906	0.9962	100.0	100.0	24689.7
0.8934	39775.0	39620.2	0.40	0.9931	0.9997	100.0	100.0	39607.9
W(12)= 3.945825				W(21)= 1.125348				
BESE(Y)= 0.0545				a.d.(Y1)= 0.0288				
a.d.ABS(Pt)=1835.3				a.d.REL(Pt)= 0.112				
R^2/N=0.04995				a.d.(T)= 0.07				

FILE:HAR100

				f(S) Linear Fit Wijs				
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0987	1972.8	1994.8	1.10	0.5240	0.6584	100.0	100.0	1313.3
0.3994	10775.0	8981.8	16.60	0.9470	0.9573	100.0	100.0	8598.2
0.4900	15905.0	12487.7	21.50	0.9762	0.9768	100.0	100.0	12197.8
0.7081	28180.0	24848.0	11.80	0.9906	0.9961	100.0	100.0	24750.0
0.8934	39775.0	39610.3	0.40	0.9931	0.9997	100.0	100.0	39597.5
W(12)= 3.989053				W(21)= 1.038263				
BESE(Y)= 0.0604				a.d.(Y1)= 0.0315				
a.d.ABS(Pt)=1745.8				a.d.REL(Pt)= 0.103				
R^2/N=0.05194				a.d.(T)= 0.07				



FILE:MUL100				Grid Search Wijs				
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0647	1433.0	1458.0	1.70	0.5150	0.5132	100.0	100.0	748.3
0.0658	1508.0	1471.5	2.40	0.5190	0.5183	100.0	100.0	762.7
0.0917	1868.0	1806.2	3.30	0.6170	0.6202	100.0	100.0	1120.2
0.1033	1928.0	1967.2	2.00	0.6670	0.6566	100.0	100.0	1291.6
0.1166	2220.0	2160.6	2.70	0.6900	0.6930	100.0	100.0	1497.2
0.1475	2813.0	2647.9	5.90	0.7560	0.7605	100.0	100.0	2013.6
0.1850	3450.0	3315.2	3.90	0.8200	0.8198	100.0	100.0	2717.7
0.2479	5040.0	4641.6	7.90	0.8840	0.8851	100.0	100.0	4108.2
0.3181	7388.0	6468.3	12.40	0.9300	0.9290	100.0	100.0	6009.1
W(12)= 3.49				W(21)= 1.29				
BESE(Y)= 0.0041				a.d.(Y1)= 0.0029				
a.d.ABS(Pt)= 204.4				a.d.REL(Pt)= 0.047				
R^2/N=0.00013				a.d.(T)= 0.09				

FILE:MUL100

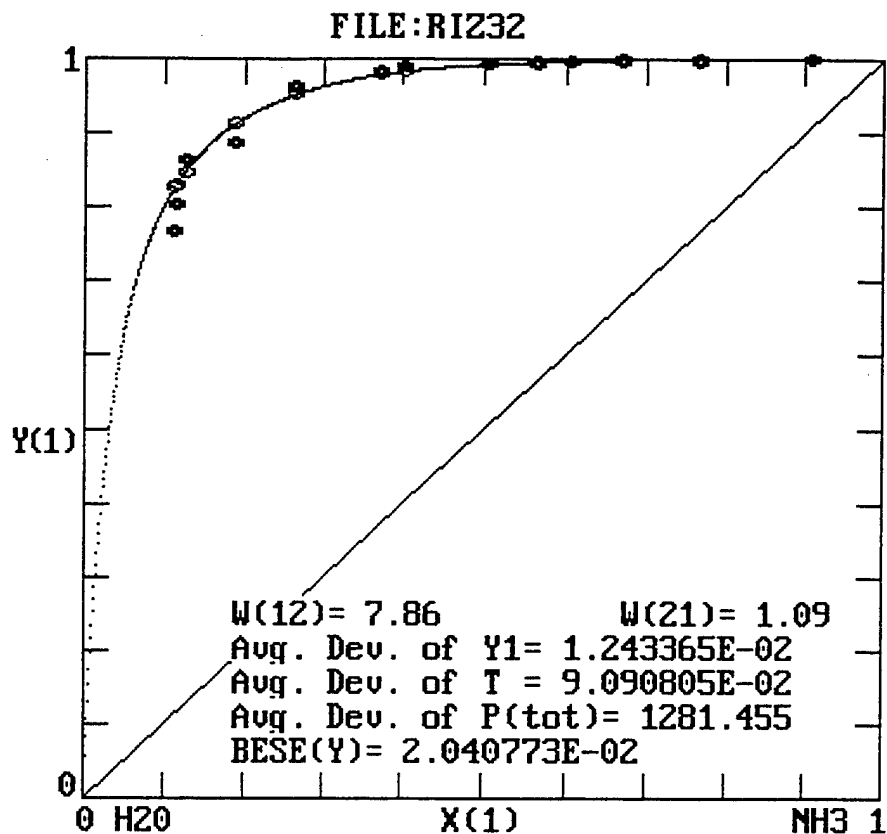
				f(S) Curved Fit Wijs				
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0647	1433.0	1475.1	2.90	0.5150	0.5185	100.0	100.0	764.9
0.0658	1508.0	1488.7	1.30	0.5190	0.5235	100.0	100.0	779.4
0.0917	1868.0	1823.5	2.40	0.6170	0.6233	100.0	100.0	1136.5
0.1033	1928.0	1983.2	2.90	0.6670	0.6588	100.0	100.0	1306.5
0.1166	2220.0	2174.1	2.10	0.6900	0.6942	100.0	100.0	1509.3
0.1475	2813.0	2651.1	5.80	0.7560	0.7600	100.0	100.0	2014.9
0.1850	3450.0	3297.6	4.40	0.8200	0.8179	100.0	100.0	2697.2
0.2479	5040.0	4567.5	9.40	0.8840	0.8823	100.0	100.0	4029.8
0.3181	7388.0	6299.4	14.70	0.9300	0.9262	100.0	100.0	5834.7

W(12)= 3.945825 W(21)= 1.125348
 BESE(Y)= 0.0047 a.d.(Y1)= 0.0043
 a.d.ABS(Pt)= 231.4 a.d.REL(Pt)= 0.051
 R^2/N=0.00027 a.d.(T)= 0.09

FILE:MUL100

				f(S) Linear Fit Wijs				
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0647	1433.0	1526.6	6.50	0.5150	0.5346	100.0	100.0	816.1
0.0658	1508.0	1541.0	2.20	0.5190	0.5396	100.0	100.0	831.5
0.0917	1868.0	1894.8	1.40	0.6170	0.6372	100.0	100.0	1207.3
0.1033	1928.0	2062.6	7.00	0.6670	0.6716	100.0	100.0	1385.3
0.1166	2220.0	2262.6	1.90	0.6900	0.7058	100.0	100.0	1597.0
0.1475	2813.0	2759.4	1.90	0.7560	0.7690	100.0	100.0	2121.9
0.1850	3450.0	3427.5	0.70	0.8200	0.8243	100.0	100.0	2825.3
0.2479	5040.0	4726.6	6.20	0.8840	0.8856	100.0	100.0	4186.1
0.3181	7388.0	6479.6	12.30	0.9300	0.9277	100.0	100.0	6010.9

W(12)= 3.989053 W(21)= 1.038263
 BESE(Y)= 0.0137 a.d.(Y1)= 0.0113
 a.d.ABS(Pt)= 180.9 a.d.REL(Pt)= 0.045
 R^2/N=0.00109 a.d.(T)= 0.09



FILE:RIZ32					Grid Search Wijs				
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)	
0.1122	270.0	184.1	31.80	0.7660	0.8255	32.4	32.4	152.0	
0.1157	285.0	189.8	33.40	0.8039	0.8315	32.4	32.4	157.8	
0.1263	495.0	207.4	58.10	0.8632	0.8481	32.4	32.4	175.9	
0.1883	390.0	325.4	16.60	0.8862	0.9121	32.4	32.4	296.8	
0.2648	1320.1	512.3	61.20	0.9633	0.9517	32.4	32.4	487.5	
0.3740	1792.6	883.9	50.70	0.9832	0.9786	32.4	32.4	865.0	
0.4017	2482.7	1003.2	59.60	0.9891	0.9826	32.4	32.4	985.7	
0.5046	3900.3	1563.7	59.90	0.9935	0.9924	32.4	32.4	1551.7	
0.5645	3802.8	1997.9	47.50	0.9930	0.9955	32.4	32.4	1988.9	
0.6051	4252.8	2350.0	44.70	0.9953	0.9970	32.4	32.4	2342.9	
0.6710	5437.9	3044.6	44.00	0.9960	0.9985	32.4	32.4	3040.1	
0.7670	7065.6	4407.7	37.60	0.9976	0.9996	32.4	32.4	4406.0	
0.9085	9240.8	7406.9	19.80	0.9989	1.0000	32.4	32.4	7406.8	
W(12)= 7.86				W(21)= 1.09					
BESE(Y)= 0.0204				a.d. (Y1)= 0.0124					
a.d.ABS(Pt)=1281.5				a.d.REL(Pt)= 0.435					
R^2/N=0.06073				a.d. (T)= 0.09					

FILE:RIZ32

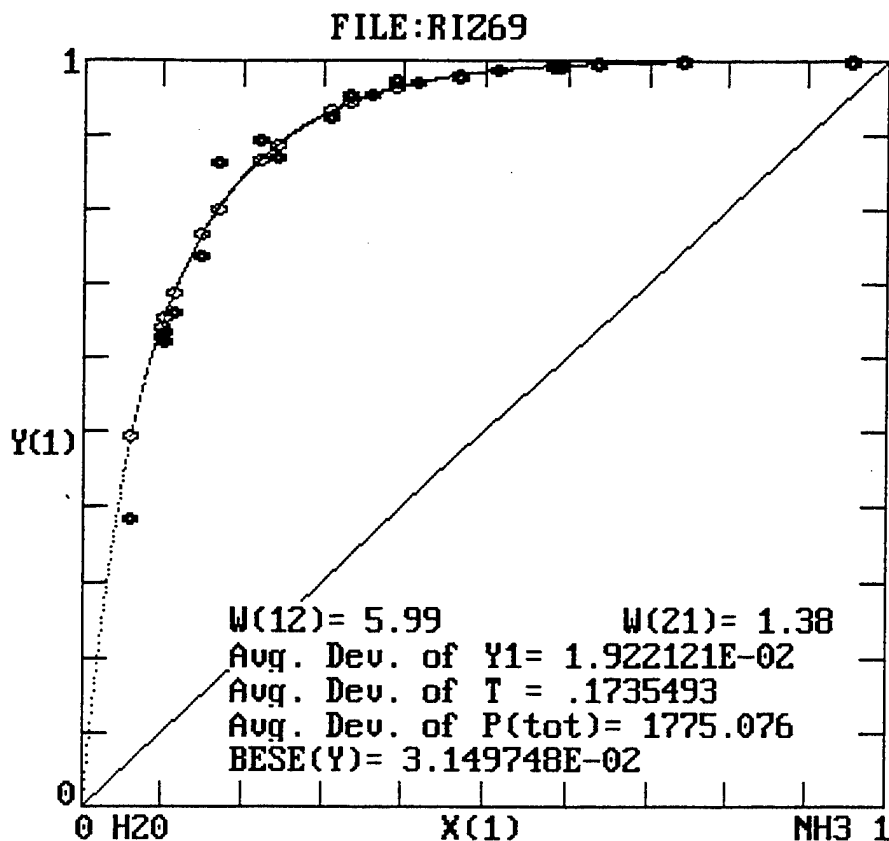
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.1122	270.0	185.2	31.40	0.7660	0.8279	32.4	32.4	153.3
0.1157	285.0	191.5	32.80	0.8039	0.8344	32.4	32.4	159.8
0.1263	495.0	211.2	57.30	0.8632	0.8523	32.4	32.4	180.0
0.1883	390.0	349.4	10.40	0.8862	0.9198	32.4	32.4	321.4
0.2648	1320.1	582.1	55.90	0.9633	0.9590	32.4	32.4	558.2
0.3740	1792.6	1064.5	40.60	0.9832	0.9833	32.4	32.4	1046.8
0.4017	2482.7	1220.9	50.80	0.9891	0.9867	32.4	32.4	1204.6
0.5046	3900.3	1948.9	50.00	0.9935	0.9944	32.4	32.4	1937.9
0.5645	3802.8	2497.3	34.30	0.9930	0.9967	32.4	32.4	2489.1
0.6051	4252.8	2929.5	31.10	0.9953	0.9978	32.4	32.4	2923.0
0.6710	5437.9	3746.9	31.10	0.9960	0.9989	32.4	32.4	3742.7
0.7670	7065.6	5217.3	26.20	0.9976	0.9997	32.4	32.4	5215.5
0.9085	9240.8	7892.5	14.60	0.9989	1.0000	32.4	32.4	7892.4

W(12) = 5.094446 W(21) = 1.650598
 BESE(Y) = 0.0216 a.d.(Y1) = 0.0121
 a.d.ABS(Pt) = 976.8 a.d.REL(Pt) = 0.359
 R^2/N = 0.06820 a.d.(T) = 0.09

FILE:RIZ32

X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.1122	270.0	179.2	33.60	0.7660	0.8223	32.4	32.4	147.3
0.1157	285.0	185.3	35.00	0.8039	0.8291	32.4	32.4	153.6
0.1263	495.0	204.5	58.70	0.8632	0.8477	32.4	32.4	173.4
0.1883	390.0	340.1	12.80	0.8862	0.9178	32.4	32.4	312.1
0.2648	1320.1	570.4	56.80	0.9633	0.9584	32.4	32.4	546.7
0.3740	1792.6	1051.8	41.30	0.9832	0.9833	32.4	32.4	1034.2
0.4017	2482.7	1208.3	51.30	0.9891	0.9867	32.4	32.4	1192.2
0.5046	3900.3	1938.6	50.30	0.9935	0.9944	32.4	32.4	1927.9
0.5645	3802.8	2489.5	34.50	0.9930	0.9968	32.4	32.4	2481.4
0.6051	4252.8	2923.7	31.30	0.9953	0.9978	32.4	32.4	2917.2
0.6710	5437.9	3744.6	31.10	0.9960	0.9989	32.4	32.4	3740.4
0.7670	7065.6	5219.6	26.10	0.9976	0.9997	32.4	32.4	5217.8
0.9085	9240.8	7895.8	14.60	0.9989	1.0000	32.4	32.4	7895.6

W(12) = 5.066876 W(21) = 1.716776
 BESE(Y) = 0.0198 a.d.(Y1) = 0.0115
 a.d.ABS(Pt) = 983.4 a.d.REL(Pt) = 0.367
 R^2/N = 0.06787 a.d.(T) = 0.09



FILE:RIZ69					Grid Search Wijs			
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0621	667.6	406.7	39.10	0.3825	0.4931	68.6	68.6	200.6
0.0985	990.1	544.9	45.00	0.6254	0.6392	68.6	68.6	348.3
0.1029	1020.1	563.3	44.80	0.6336	0.6531	68.6	68.6	367.9
0.1030	885.1	563.7	36.30	0.6184	0.6534	68.6	68.6	368.3
0.1143	975.1	612.6	37.20	0.6597	0.6862	68.6	68.6	420.3
0.1491	1155.1	779.5	32.50	0.7371	0.7661	68.6	68.6	597.2
0.1497	1267.6	782.6	38.30	0.7357	0.7673	68.6	68.6	600.4
0.1688	1515.1	885.7	41.50	0.8633	0.8007	68.6	68.6	709.2
0.2214	2002.7	1216.1	39.30	0.8930	0.8682	68.6	68.6	1055.8
0.2416	2047.7	1362.9	33.40	0.8691	0.8871	68.6	68.6	1209.0
0.3102	3037.7	1956.8	35.60	0.9235	0.9327	68.6	68.6	1825.2
0.3322	4005.3	2182.2	45.50	0.9550	0.9430	68.6	68.6	2057.8
0.3603	4207.8	2497.8	40.60	0.9542	0.9539	68.6	68.6	2382.8
0.3900	5392.9	2868.2	46.80	0.9744	0.9633	68.6	68.6	2763.0
0.4188	5415.4	3266.8	39.70	0.9693	0.9707	68.6	68.6	3170.9
0.4702	6750.6	4085.5	39.50	0.9778	0.9805	68.6	68.6	4006.0
0.5160	8565.7	4946.5	42.30	0.9879	0.9867	68.6	68.6	4880.9
0.5815	10770.9	6430.4	40.30	0.9895	0.9926	68.6	68.6	6383.1
0.5909	11003.4	6670.6	39.40	0.9906	0.9933	68.6	68.6	6625.8
0.6369	13118.6	7956.9	39.30	0.9937	0.9958	68.6	68.6	7923.1
0.7414	16313.8	11656.6	28.50	0.9960	0.9988	68.6	68.6	11642.3
0.9560	21631.8	21452.2	0.80	0.9970	1.0000	68.6	66.62	21452.1
$W(12) = 5.99$				$W(21) = 1.38$				
BESE(Y) = 0.0315				a.d.(Y1) = 0.0192				
a.d.ABS(Pt) = 1775.1				a.d.REL(Pt) = 0.375				
$R^2/N = 0.02246$				a.d.(T) = 0.17				

FILE:RIZ69

X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	f(S)	Curved Fit	Wij
						T(i)	T(c)	Pl(c)
0.0621	667.6	505.2	24.30	0.3825	0.5915	68.6	68.6	298.8
0.0985	990.1	707.1	28.60	0.6254	0.7213	68.6	68.6	510.0
0.1029	1020.1	733.4	28.10	0.6336	0.7329	68.6	68.6	537.5
0.1030	885.1	734.0	17.10	0.6184	0.7331	68.6	68.6	538.1
0.1143	975.1	803.8	17.60	0.6597	0.7600	68.6	68.6	610.8
0.1491	1155.1	1037.5	10.20	0.7371	0.8233	68.6	68.6	854.2
0.1497	1267.6	1041.8	17.80	0.7357	0.8241	68.6	68.6	858.6
0.1688	1515.1	1183.5	21.90	0.8633	0.8497	68.6	68.6	1005.7
0.2214	2002.7	1626.2	18.80	0.8930	0.9001	68.6	68.6	1463.7
0.2416	2047.7	1818.4	11.20	0.8691	0.9140	68.6	68.6	1662.1
0.3102	3037.7	2576.0	15.20	0.9235	0.9476	68.6	68.6	2441.0
0.3322	4005.3	2856.7	28.70	0.9550	0.9551	68.6	68.6	2728.5
0.3603	4207.8	3244.5	22.90	0.9542	0.9633	68.6	68.6	3125.3
0.3900	5392.9	3692.9	31.50	0.9744	0.9703	68.6	68.6	3583.0
0.4188	5415.4	4168.1	23.00	0.9693	0.9758	68.6	68.6	4067.3
0.4702	6750.6	5124.3	24.10	0.9778	0.9834	68.6	68.6	5039.4
0.5160	8565.7	6105.3	28.70	0.9879	0.9883	68.6	68.6	6034.0
0.5815	10770.9	7745.7	28.10	0.9895	0.9932	68.6	68.6	7692.7
0.5909	11003.4	8005.9	27.20	0.9906	0.9937	68.6	68.6	7955.4
0.6369	13118.6	9376.1	28.50	0.9937	0.9958	68.6	68.6	9336.9
0.7414	16313.8	13121.8	19.60	0.9960	0.9986	68.6	68.6	13103.5
0.9560	21631.8	21627.7	0.00	0.9970	1.0000	68.6	66.6	21627.3

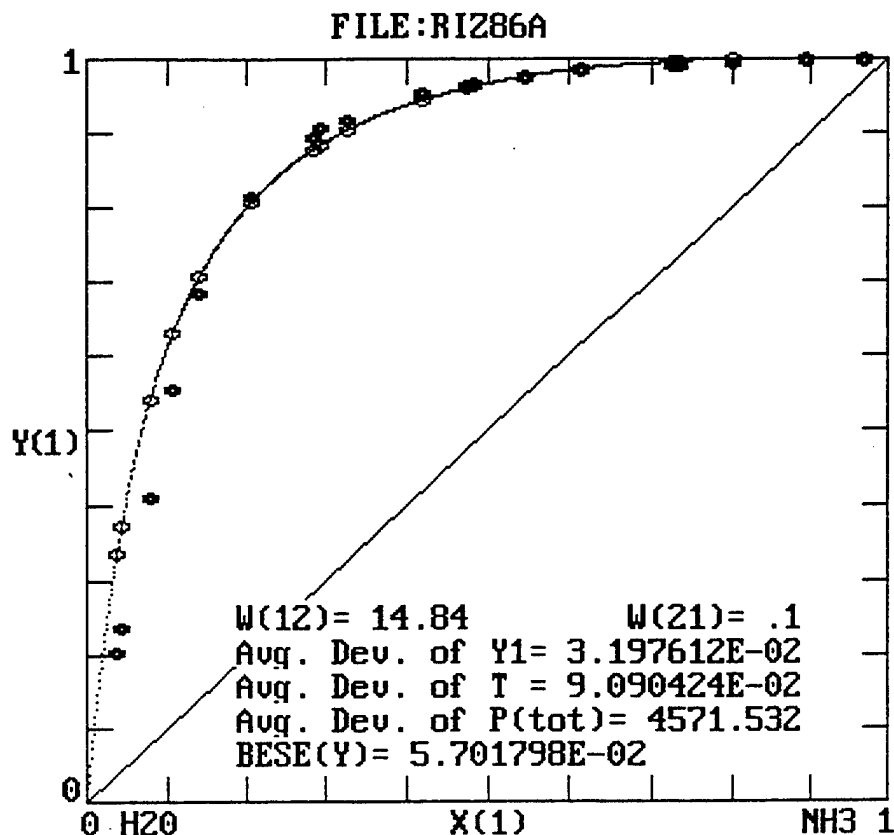
W(12)= 4.596125 W(21)= 1.214403
 BESE(Y)= 0.0688 a.d.(Y1)= 0.0420
 a.d.ABS(Pt)=1132.0 a.d.REL(Pt)= 0.215
 R^2/N=0.05004 a.d.(T)= 0.18

Blank

FILE:RIZ69

X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	f(S)	Linear Fit	Wijs
						T(i)	T(c)	Pl(c)
0.0621	667.6	490.6	26.50	0.3825	0.5794	68.6	68.6	284.2
0.0985	990.1	684.6	30.90	0.6254	0.7123	68.6	68.6	487.6
0.1029	1020.1	710.0	30.40	0.6336	0.7243	68.6	68.6	514.2
0.1030	885.1	710.6	19.70	0.6184	0.7245	68.6	68.6	514.8
0.1143	975.1	778.0	20.20	0.6597	0.7523	68.6	68.6	585.3
0.1491	1155.1	1005.2	13.00	0.7371	0.8179	68.6	68.6	822.1
0.1497	1267.6	1009.3	20.40	0.7357	0.8188	68.6	68.6	826.4
0.1688	1515.1	1147.6	24.30	0.8633	0.8454	68.6	68.6	970.2
0.2214	2002.7	1582.4	21.00	0.8930	0.8977	68.6	68.6	1420.5
0.2416	2047.7	1772.1	13.50	0.8691	0.9122	68.6	68.6	1616.5
0.3102	3037.7	2523.5	16.90	0.9235	0.9468	68.6	68.6	2389.3
0.3322	4005.3	2803.0	30.00	0.9550	0.9546	68.6	68.6	2675.8
0.3603	4207.8	3190.0	24.20	0.9542	0.9629	68.6	68.6	3071.8
0.3900	5392.9	3638.3	32.50	0.9744	0.9701	68.6	68.6	3529.5
0.4188	5415.4	4114.1	24.00	0.9693	0.9758	68.6	68.6	4014.5
0.4702	6750.6	5073.5	24.80	0.9778	0.9835	68.6	68.6	4989.8
0.5160	8565.7	6059.1	29.30	0.9879	0.9884	68.6	68.6	5989.0
0.5815	10770.9	7709.2	28.40	0.9895	0.9933	68.6	68.6	7657.2
0.5909	11003.4	7971.0	27.60	0.9906	0.9938	68.6	68.6	7921.5
0.6369	13118.6	9349.7	28.70	0.9937	0.9959	68.6	68.6	9311.4
0.7414	16313.8	13116.0	19.60	0.9960	0.9986	68.6	68.6	13098.2
0.9560	21631.8	21630.7	0.00	0.9970	1.0000	68.6	66.62	21630.3

W(12)= 4.562312 W(21)= 1.281412
 BESE(Y)= 0.0642 a.d.(Y1)= 0.0394
 a.d.ABS(Pt)=1166.9 a.d.REL(Pt)= 0.230
 R^2/N=0.04515 a.d.(T)= 0.18



FILE:RIZ86A					Grid Search Wtjs			
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0368	870.1	670.5	22.90	0.2025	0.3376	86.5	86.5	226.4
0.0428	907.6	706.0	22.20	0.2352	0.3749	86.5	86.5	264.7
0.0777	1147.6	920.6	19.80	0.4114	0.5391	86.5	86.5	496.3
0.1064	1440.1	1108.4	23.00	0.5534	0.6301	86.5	86.5	698.4
0.1399	1897.7	1341.8	29.30	0.6826	0.7073	86.5	86.5	949.0
0.2054	2895.2	1848.4	36.20	0.8150	0.8064	86.5	86.5	1490.6
0.2837	4672.9	2559.6	45.20	0.8948	0.8775	86.5	86.5	2246.1
0.2935	4830.4	2658.3	45.00	0.9053	0.8842	86.5	86.5	2350.5
0.3261	5753.0	3004.0	47.80	0.9154	0.9040	86.5	86.5	2715.5
0.4173	8918.2	4142.6	53.50	0.9517	0.9439	86.5	86.5	3910.1
0.4724	11325.9	4985.7	56.00	0.9635	0.9604	86.5	86.5	4788.1
0.4805	11370.9	5121.8	55.00	0.9655	0.9624	86.5	86.5	4929.4
0.5442	14378.7	6323.7	56.00	0.9750	0.9760	86.5	86.5	6171.8
0.6162	18114.0	8038.8	55.60	0.9831	0.9867	86.5	86.5	7931.5
0.7257	23199.4	11780.5	49.20	0.9890	0.9960	86.5	86.5	11732.9
0.7337	23604.4	12130.7	48.60	0.9898	0.9964	86.5	86.5	12086.7
0.7997	26424.7	15608.6	40.90	0.9918	0.9988	86.5	86.5	15589.7
0.8934	30467.5	23263.8	23.60	0.9957	0.9999	86.5	86.5	23261.9
0.9711	33932.8	33078.1	2.50	0.9980	1.0000	86.5	86.5	33078.1
W(12)= 14.84					W(21)= .1			
BESE(Y)= 0.0570					a.d.(Y1)= 0.0320			
a.d.ABS(Pt)=4571.5					a.d.REL(Pt)= 0.385			
R^2/N=0.03757					a.d.(T)= 0.09			

FILE:RIZ86A

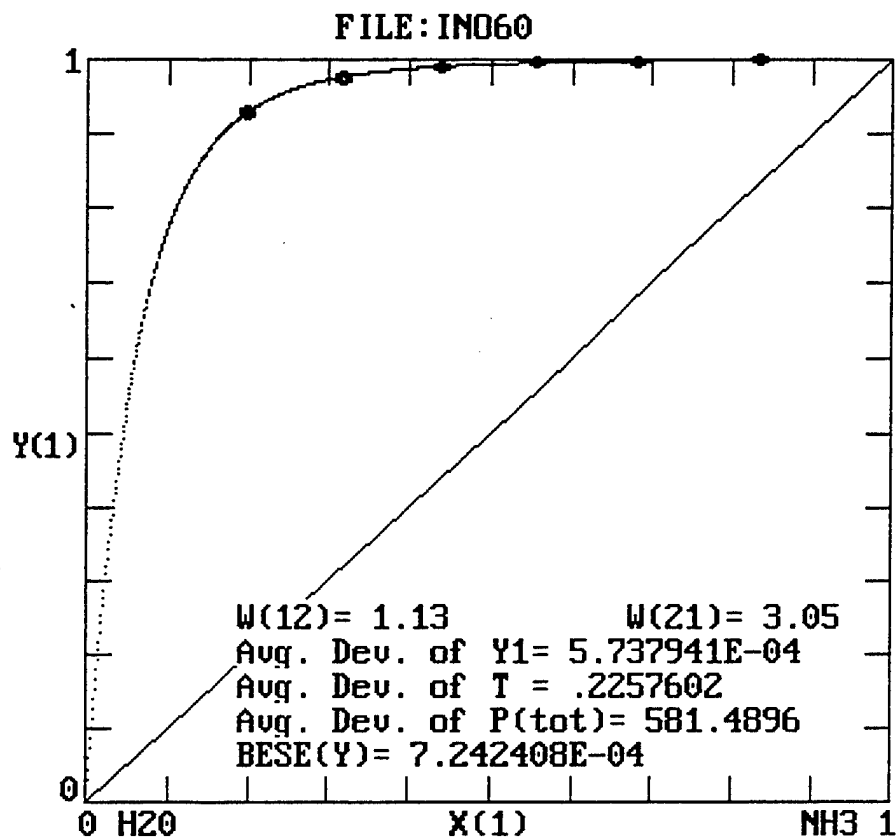
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0368	870.1	734.1	15.60	0.2025	0.3953	86.5	86.5	290.2
0.0428	907.6	782.2	13.80	0.2352	0.4363	86.5	86.5	341.2
0.0777	1147.6	1083.0	5.60	0.4114	0.6093	86.5	86.5	659.8
0.1064	1440.1	1359.4	5.60	0.5534	0.7000	86.5	86.5	951.6
0.1399	1897.7	1718.3	9.50	0.6826	0.7735	86.5	86.5	1329.1
0.2054	2895.2	2546.1	12.10	0.8150	0.8622	86.5	86.5	2195.3
0.2837	4672.9	3790.8	18.90	0.8948	0.9203	86.5	86.5	3488.7
0.2935	4830.4	3968.9	17.80	0.9053	0.9254	86.5	86.5	3672.9
0.3261	5753.0	4600.4	20.00	0.9154	0.9402	86.5	86.5	4325.4
0.4173	8918.2	6724.9	24.60	0.9517	0.9679	86.5	86.5	6509.0
0.4724	11325.9	8302.0	26.70	0.9635	0.9782	86.5	86.5	8121.2
0.4805	11370.9	8554.7	24.80	0.9655	0.9795	86.5	86.5	8378.9
0.5442	14378.7	10745.3	25.30	0.9750	0.9872	86.5	86.5	10608.1
0.6162	18114.0	13695.4	24.40	0.9831	0.9929	86.5	86.5	13598.2
0.7257	23199.4	19254.7	17.00	0.9890	0.9975	86.5	86.5	19206.9
0.7337	23604.4	19713.0	16.50	0.9898	0.9977	86.5	86.5	19668.2
0.7997	26424.7	23742.0	10.20	0.9918	0.9990	86.5	86.5	23717.9
0.8934	30467.5	29950.0	1.70	0.9957	0.9998	86.5	86.5	29943.5
0.9711	33932.8	33866.1	0.20	0.9980	1.0000	86.5	86.5	33865.4

W(12)= 4.259582 W(21)= 1.133693
BESE(Y)= 0.0893 a.d.(Y1)= 0.0549
a.d.ABS(Pt)=1632.6 a.d.REL(Pt)= 0.153
R^2/N=0.08398 a.d.(T)= 0.14

FILE:RIZ86A

X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0368	870.1	735.7	15.40	0.2025	0.3967	86.5	86.5	291.8
0.0428	907.6	784.0	13.60	0.2352	0.4376	86.5	86.5	343.1
0.0777	1147.6	1086.3	5.30	0.4114	0.6105	86.5	86.5	663.2
0.1064	1440.1	1363.9	5.30	0.5534	0.7010	86.5	86.5	956.0
0.1399	1897.7	1724.0	9.20	0.6826	0.7742	86.5	86.5	1334.7
0.2054	2895.2	2553.8	11.80	0.8150	0.8626	86.5	86.5	2202.9
0.2837	4672.9	3800.3	18.70	0.8948	0.9204	86.5	86.5	3498.0
0.2935	4830.4	3978.5	17.60	0.9053	0.9256	86.5	86.5	3682.4
0.3261	5753.0	4610.4	19.90	0.9154	0.9403	86.5	86.5	4335.2
0.4173	8918.2	6735.3	24.50	0.9517	0.9679	86.5	86.5	6519.1
0.4724	11325.9	8311.9	26.60	0.9635	0.9782	86.5	86.5	8130.8
0.4805	11370.9	8564.5	24.70	0.9655	0.9794	86.5	86.5	8388.5
0.5442	14378.7	10753.9	25.20	0.9750	0.9872	86.5	86.5	10616.5
0.6162	18114.0	13702.0	24.40	0.9831	0.9929	86.5	86.5	13604.6
0.7257	23199.4	19257.6	17.00	0.9890	0.9975	86.5	86.5	19209.7
0.7337	23604.4	19715.6	16.50	0.9898	0.9977	86.5	86.5	19670.7
0.7997	26424.7	23742.7	10.10	0.9918	0.9990	86.5	86.5	23718.5
0.8934	30467.5	29949.3	1.70	0.9957	0.9998	86.5	86.5	29942.8
0.9711	33932.8	33865.9	0.20	0.9980	1.0000	86.5	86.5	33865.3

W(12)= 4.262832 W(21)= 1.126779
BESE(Y)= 0.0899 a.d.(Y1)= 0.0553
a.d.ABS(Pt)=1627.1 a.d.REL(Pt)= 0.151
R^2/N=0.08433 a.d.(T)= 0.14



FILE: INO60

					Grid Search Wijs				
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)	
0.1970	1200.0	1489.4	24.10	0.9280	0.9287	59.7	59.7	1383.2	
0.3180	2550.0	3363.5	31.90	0.9750	0.9765	59.7	59.7	3284.5	
0.4400	4875.0	5936.9	21.80	0.9910	0.9906	59.7	59.7	5881.4	
0.5540	7951.0	8740.7	9.90	0.9960	0.9957	59.7	59.7	8702.9	
0.6830	11626.0	12092.4	4.00	0.9980	0.9982	59.7	59.7	12070.2	
0.8320	15526.0	15458.0	0.40	0.9990	0.9994	59.7	58.81	5449.0	

$W(12) = 1.13$ $W(21) = 3.05$
 $BESE(Y) = 0.0007$ a.d. (Y1) = 0.0006
 a.d. ABS(Pt) = 581.5 a.d. REL(Pt) = 0.154
 $R^2/N = 0.00202$ a.d. (T) = 0.23

FILE:INO60

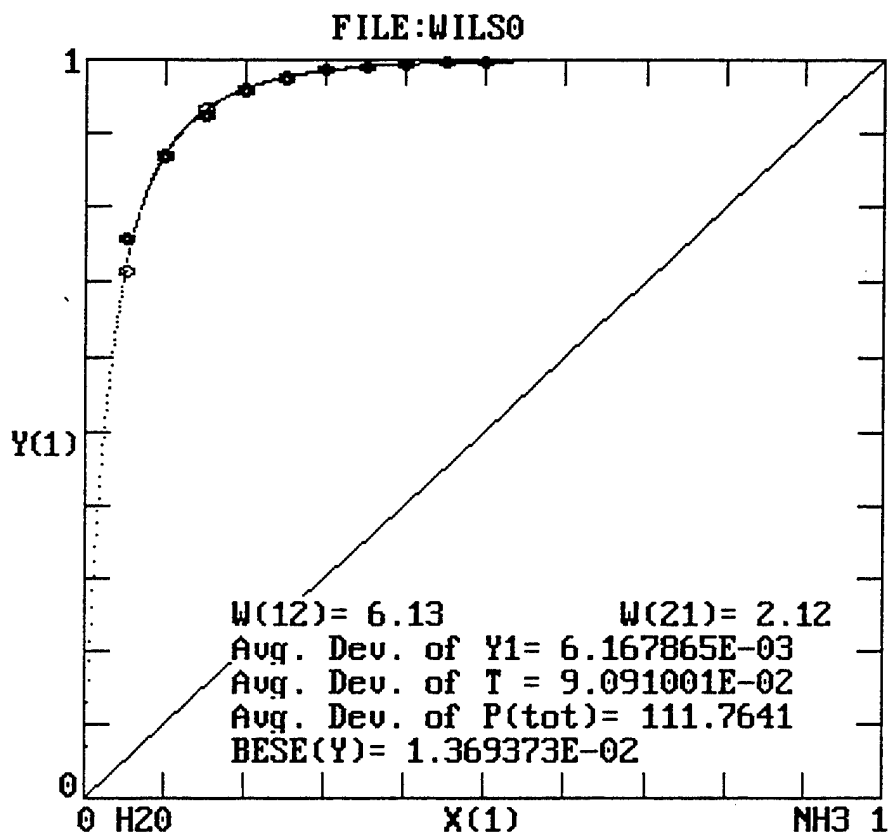
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.1970	1200.0	1049.6	12.50	0.9280	0.8920	59.7	59.7	936.3
0.3180	2550.0	2034.3	20.20	0.9750	0.9567	59.7	59.7	1946.2
0.4400	4875.0	3515.9	27.90	0.9910	0.9823	59.7	59.7	3453.8
0.5540	7951.0	5497.0	30.90	0.9960	0.9928	59.7	59.7	5457.5
0.6830	11626.0	8644.7	25.60	0.9980	0.9978	59.7	59.7	8626.1
0.8320	15526.0	13662.6	12.00	0.9990	0.9997	59.7	59.7	13658.3

W(12)= 4.738435 W(21)= 1.284034
 BESE(Y)= 0.0169 a.d.(Y1)= 0.0112
 a.d.ABS(Pt)=1554.0 a.d.REL(Pt)= 0.215
 R^2/N=0.08035 a.d.(T)= 0.09

FILE:INO60

X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.1970	1200.0	1010.4	15.80	0.9280	0.8883	59.7	59.7	897.5
0.3180	2550.0	1983.0	22.20	0.9750	0.9560	59.7	59.7	1895.7
0.4400	4875.0	3465.0	28.90	0.9910	0.9824	59.7	59.7	3404.0
0.5540	7951.0	5458.4	31.30	0.9960	0.9929	59.7	59.7	5420.0
0.6830	11626.0	8630.0	25.80	0.9980	0.9979	59.7	59.7	8612.0
0.8320	15526.0	13671.1	11.90	0.9990	0.9997	59.7	59.7	13667.1

W(12)= 4.695089 W(21)= 1.372966
 BESE(Y)= 0.0184 a.d.(Y1)= 0.0119
 a.d.ABS(Pt)=1585.0 a.d.REL(Pt)= 0.227
 R^2/N=0.08422 a.d.(T)= 0.09



FILE:WILSO					Grid Search Wijs			
$X_1(i)$	$Pt(i)$	$Pt(c)$	%dPt	$Y_1(i)$	$Y_1(c)$	$T(i)$	$T(c)$	$P_1(c)$
0.0500	17.6	15.3	13.10	0.7570	0.7149	0.0	0.0	10.9
0.1000	31.0	31.5	1.40	0.8680	0.8712	0.0	0.0	27.4
0.1500	50.2	54.4	8.50	0.9237	0.9317	0.0	0.0	50.7
0.2000	81.7	85.5	4.60	0.9557	0.9608	0.0	0.0	82.1
0.2500	134.5	126.2	6.10	0.9750	0.9764	0.0	0.0	123.3
0.3000	217.2	178.3	17.90	0.9857	0.9854	0.0	0.0	175.7
0.3500	338.2	243.4	28.00	0.9914	0.9908	0.0	0.0	241.2
0.4000	513.5	323.8	36.90	0.9948	0.9942	0.0	0.0	321.9
0.4500	733.3	421.7	42.50	0.9966	0.9963	0.0	0.0	420.1
0.5000	1003.3	539.7	46.20	0.9978	0.9977	0.0	0.0	538.4
$W(12) = 6.13$				$W(21) = 2.12$				
$BESE(Y) = 0.0137$				a.d.(Y_1) = 0.0062				
a.d.ABS(Pt) = 111.8				a.d.REL(Pt) = 0.205				
$R^2/N = 0.00511$				a.d.(T) = 0.09				

FILE:WILSO

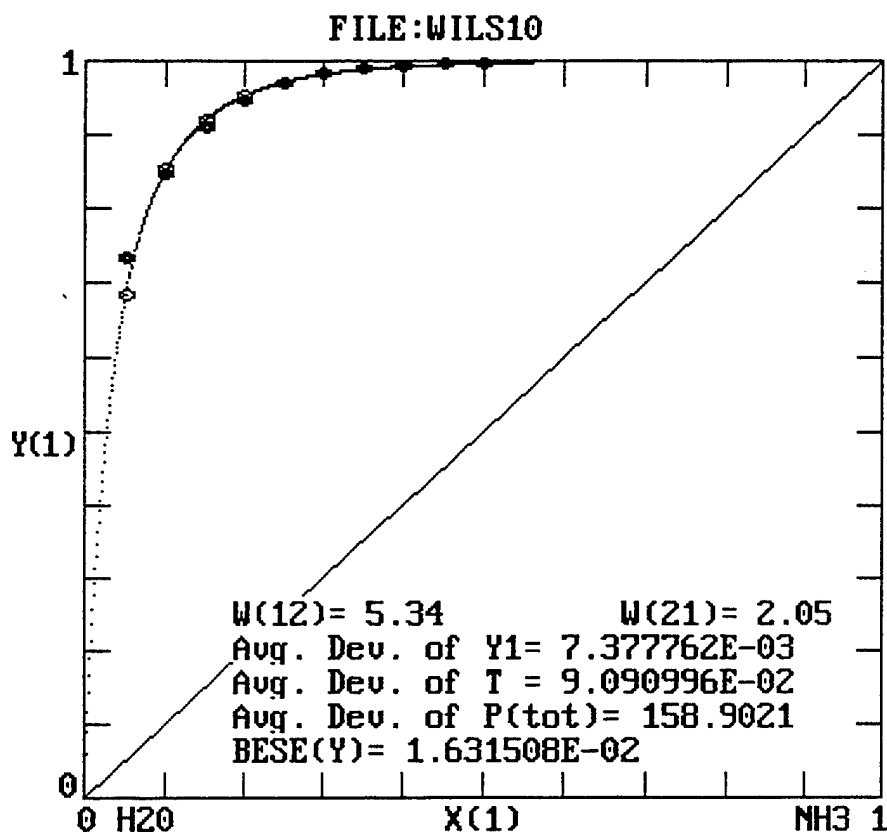
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0500	17.6	13.0	25.90	0.7570	0.6663	0.0	0.0	8.7
0.1000	31.0	27.4	11.70	0.8680	0.8532	0.0	0.0	23.4
0.1500	50.2	49.3	1.70	0.9237	0.9259	0.0	0.0	45.7
0.2000	81.7	80.5	1.40	0.9557	0.9594	0.0	0.0	77.3
0.2500	134.5	122.8	8.70	0.9750	0.9765	0.0	0.0	119.9
0.3000	217.2	177.9	18.10	0.9857	0.9860	0.0	0.0	175.4
0.3500	338.2	247.9	26.70	0.9914	0.9914	0.0	0.0	245.8
0.4000	513.5	334.8	34.80	0.9948	0.9947	0.0	0.0	333.0
0.4500	733.3	440.9	39.90	0.9966	0.9967	0.0	0.0	439.4
0.5000	1003.3	568.5	43.30	0.9978	0.9980	0.0	0.0	567.3

W(12)= 5.396007 W(21)= 2.568104
 BESE(Y)= 0.0291 a.d.(Y1)= 0.0114
 a.d.ABS(Pt)= 105.7 a.d.REL(Pt)= 0.212
 R^2/N=0.01061 a.d.(T)= 0.09

FILE:WILSO

X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0500	17.6	15.2	13.40	0.7570	0.7140	0.0	0.0	10.9
0.1000	31.0	31.9	2.70	0.8680	0.8731	0.0	0.0	27.8
0.1500	50.2	56.0	11.50	0.9237	0.9339	0.0	0.0	52.3
0.2000	81.7	89.0	9.00	0.9557	0.9626	0.0	0.0	85.7
0.2500	134.5	132.7	1.30	0.9750	0.9777	0.0	0.0	129.8
0.3000	217.2	188.7	13.10	0.9857	0.9864	0.0	0.0	186.2
0.3500	338.2	259.0	23.40	0.9914	0.9915	0.0	0.0	256.8
0.4000	513.5	345.5	32.70	0.9948	0.9946	0.0	0.0	343.7
0.4500	733.3	450.6	38.60	0.9966	0.9966	0.0	0.0	449.1
0.5000	1003.3	576.6	42.50	0.9978	0.9979	0.0	0.0	575.4

W(12)= 5.48988 W(21)= 2.261285
 BESE(Y)= 0.0143 a.d.(Y1)= 0.0069
 a.d.ABS(Pt)= 100.3 a.d.REL(Pt)= 0.188
 R^2/N=0.00662 a.d.(T)= 0.09



FILE:WILS10					Grid Search Wijs				
$X_1(i)$	$Pt(i)$	$Pt(c)$	%dPt	$Y_1(i)$	$Y_1(c)$	$T(i)$	$T(c)$	$P_1(c)$	
0.0500	33.1	27.7	16.30	0.7339	0.6839	10.0	10.0	18.9	
0.1000	54.3	55.0	1.30	0.8480	0.8519	10.0	10.0	46.9	
0.1500	85.3	93.2	9.20	0.9091	0.9197	10.0	10.0	85.7	
0.2000	138.1	144.2	4.40	0.9476	0.9530	10.0	10.0	137.4	
0.2500	221.9	210.3	5.20	0.9697	0.9713	10.0	10.0	204.3	
0.3000	349.1	293.9	15.80	0.9822	0.9820	10.0	10.0	288.6	
0.3500	535.2	397.7	25.70	0.9894	0.9885	10.0	10.0	393.1	
0.4000	793.3	524.4	33.90	0.9934	0.9926	10.0	10.0	520.5	
0.4500	1119.6	677.3	39.50	0.9956	0.9953	10.0	10.0	674.1	
0.5000	1513.2	859.7	43.20	0.9971	0.9970	10.0	10.0	857.2	
$W(12) = 5.34$					$W(21) = 2.05$				
$BESE(Y) = 0.0163$					a.d.(Y_1) = 0.0074				
a.d.ABS(Pt) = 158.9					a.d.REL(Pt) = 0.195				
$R^2/N = 0.00544$					a.d.(T) = 0.09				

FILE:WILS10

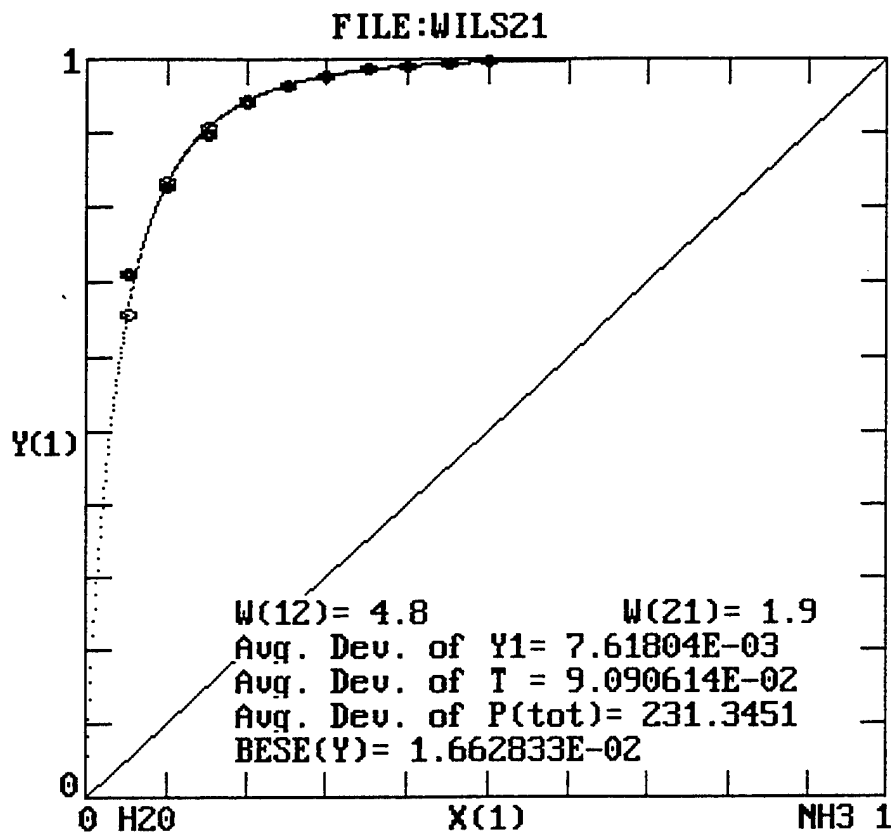
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	Pl(c)
0.0500	33.1	25.5	22.90	0.7339	0.6574	10.0	10.0	16.8
0.1000	54.3	50.7	6.70	0.8480	0.8396	10.0	10.0	42.5
0.1500	85.3	86.7	1.60	0.9091	0.9142	10.0	10.0	79.3
0.2000	138.1	135.9	1.60	0.9476	0.9506	10.0	10.0	129.2
0.2500	221.9	200.5	9.60	0.9697	0.9703	10.0	10.0	194.5
0.3000	349.1	283.0	18.90	0.9822	0.9816	10.0	10.0	277.8
0.3500	535.2	386.1	27.90	0.9894	0.9884	10.0	10.0	381.6
0.4000	793.3	512.6	35.40	0.9934	0.9927	10.0	10.0	508.9
0.4500	1119.6	665.8	40.50	0.9956	0.9954	10.0	10.0	662.7
0.5000	1513.2	849.1	43.90	0.9971	0.9971	10.0	10.0	846.6

W(12)= 5.313761 W(21)= 2.205537
 BESE(Y)= 0.0244 a.d.(Y1)= 0.0096
 a.d.ABS(Pt)= 165.0 a.d.REL(Pt)= 0.209
 R^2/N=0.00708 a.d.(T)= 0.09

FILE:WILS10

X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	Pl(c)
0.0500	33.1	27.2	17.70	0.7339	0.6786	10.0	10.0	18.5
0.1000	54.3	54.1	0.40	0.8480	0.8493	10.0	10.0	45.9
0.1500	85.3	91.7	7.50	0.9091	0.9185	10.0	10.0	84.2
0.2000	138.1	142.2	3.00	0.9476	0.9525	10.0	10.0	135.5
0.2500	221.9	207.8	6.30	0.9697	0.9710	10.0	10.0	201.8
0.3000	349.1	291.0	16.60	0.9822	0.9819	10.0	10.0	285.7
0.3500	535.2	394.3	26.30	0.9894	0.9885	10.0	10.0	389.7
0.4000	793.3	520.6	34.40	0.9934	0.9926	10.0	10.0	516.8
0.4500	1119.6	673.2	39.90	0.9956	0.9953	10.0	10.0	670.0
0.5000	1513.2	855.4	43.50	0.9971	0.9970	10.0	10.0	852.8

W(12)= 5.357194 W(21)= 2.07638
 BESE(Y)= 0.0178 a.d.(Y1)= 0.0075
 a.d.ABS(Pt)= 160.7 a.d.REL(Pt)= 0.196
 R^2/N=0.00552 a.d.(T)= 0.09



FILE:WILS21					Grid Search Wijs			
$X_1(i)$	$P_t(i)$	$P_t(c)$	%dPt	$Y_1(i)$	$Y_1(c)$	$T(i)$	$T(c)$	$P_1(c)$
0.0500	60.5	52.2	13.80	0.7090	0.6580	21.1	21.1	34.3
0.1000	95.2	99.6	4.60	0.8260	0.8328	21.1	21.1	82.9
0.1500	150.0	163.8	9.20	0.8970	0.9064	21.1	21.1	148.4
0.2000	235.8	247.7	5.10	0.9385	0.9438	21.1	21.1	233.8
0.2500	368.7	354.6	3.80	0.9635	0.9648	21.1	21.1	342.2
0.3000	569.4	487.9	14.30	0.9773	0.9775	21.1	21.1	476.9
0.3500	856.4	651.1	24.00	0.9861	0.9854	21.1	21.1	641.6
0.4000	1243.7	848.3	31.80	0.9912	0.9904	21.1	21.1	840.1
0.4500	1726.8	1083.6	37.20	0.9943	0.9938	21.1	21.1	1076.9
0.5000	2297.2	1361.7	40.70	0.9961	0.9960	21.1	21.1	1356.2
$W(12) = 4.8$					$W(21) = 1.9$			
BESE(Y) = 0.0166					a.d. (Y_1) = 0.0076			
a.d.ABS(P_t) = 231.3					a.d.REL(P_t) = 0.185			
$R^2/N = 0.00420$					a.d. (T) = 0.09			

FILE:WILS21

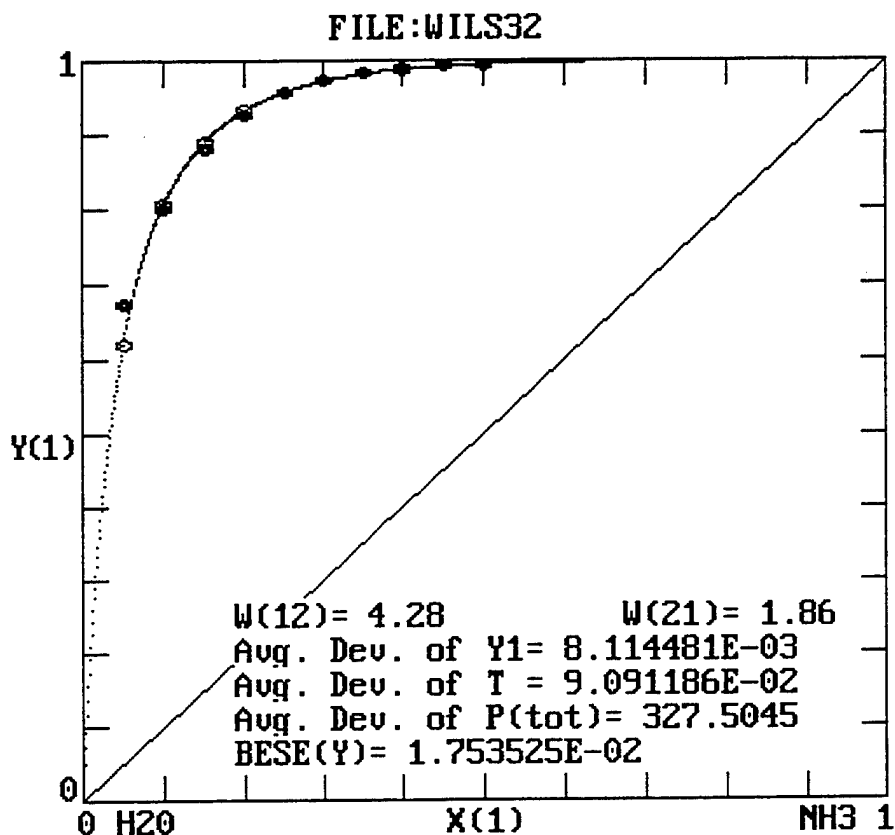
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0500	60.5	49.7	17.90	0.7090	0.6409	21.1	21.1	31.8
0.1000	95.2	93.6	1.60	0.8260	0.8223	21.1	21.1	77.0
0.1500	150.0	153.3	2.20	0.8970	0.9001	21.1	21.1	138.0
0.2000	235.8	231.6	1.80	0.9385	0.9399	21.1	21.1	217.7
0.2500	368.7	331.5	10.10	0.9635	0.9624	21.1	21.1	319.1
0.3000	569.4	456.6	19.80	0.9773	0.9760	21.1	21.1	445.6
0.3500	856.4	610.4	28.70	0.9861	0.9844	21.1	21.1	600.9
0.4000	1243.7	797.1	35.90	0.9912	0.9899	21.1	21.1	789.0
0.4500	1726.8	1021.1	40.90	0.9943	0.9934	21.1	21.1	1014.4
0.5000	2297.2	1287.3	44.00	0.9961	0.9958	21.1	21.1	1281.8

W(12)= 5.212034 W(21)= 1.893261
 BESE(Y)= 0.0216 a.d.(Y1)= 0.0083
 a.d.ABS(Pt)= 257.8 a.d.REL(Pt)= 0.203
 R^2/N=0.00610 a.d.(T)= 0.09

FILE:WILS21

X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0500	60.5	49.8	17.70	0.7090	0.6417	21.1	21.1	31.9
0.1000	95.2	93.8	1.40	0.8260	0.8226	21.1	21.1	77.2
0.1500	150.0	153.6	2.40	0.8970	0.9002	21.1	21.1	138.3
0.2000	235.8	232.0	1.60	0.9385	0.9400	21.1	21.1	218.1
0.2500	368.7	332.0	10.00	0.9635	0.9625	21.1	21.1	319.5
0.3000	569.4	457.1	19.70	0.9773	0.9760	21.1	21.1	446.1
0.3500	856.4	610.9	28.70	0.9861	0.9844	21.1	21.1	601.4
0.4000	1243.7	797.6	35.90	0.9912	0.9899	21.1	21.1	789.5
0.4500	1726.8	1021.6	40.80	0.9943	0.9934	21.1	21.1	1014.9
0.5000	2297.2	1287.7	43.90	0.9961	0.9958	21.1	21.1	1282.3

W(12)= 5.213268 W(21)= 1.888929
 BESE(Y)= 0.0214 a.d.(Y1)= 0.0082
 a.d.ABS(Pt)= 257.5 a.d.REL(Pt)= 0.202
 R^2/N=0.00603 a.d.(T)= 0.09



FILE:WILS32					Grid Search Wijs			
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0500	104.5	90.0	13.80	0.6730	0.6192	32.2	32.2	55.7
0.1000	162.9	165.5	1.60	0.8000	0.8066	32.2	32.2	133.5
0.1500	249.8	266.7	6.80	0.8800	0.8893	32.2	32.2	237.2
0.2000	384.2	397.7	3.50	0.9260	0.9325	32.2	32.2	370.9
0.2500	589.5	563.1	4.50	0.9553	0.9572	32.2	32.2	539.0
0.3000	891.0	767.6	13.90	0.9727	0.9722	32.2	32.2	746.3
0.3500	1317.7	1016.0	22.90	0.9827	0.9818	32.2	32.2	997.5
0.4000	1879.3	1313.6	30.10	0.9890	0.9880	32.2	32.2	1297.8
0.4500	2576.4	1665.9	35.30	0.9925	0.9921	32.2	32.2	1652.7
0.5000	3378.0	2078.2	38.50	0.9949	0.9948	32.2	32.2	2067.4
W(12)= 4.28					W(21)= 1.86			
BESE(Y)= 0.0175					a.d.(Y1)= 0.0081			
a.d.ABS(Pt)= 327.5					a.d.REL(Pt)= 0.171			
R^2/N=0.00366					a.d.(T)= 0.09			

FILE:WILS32

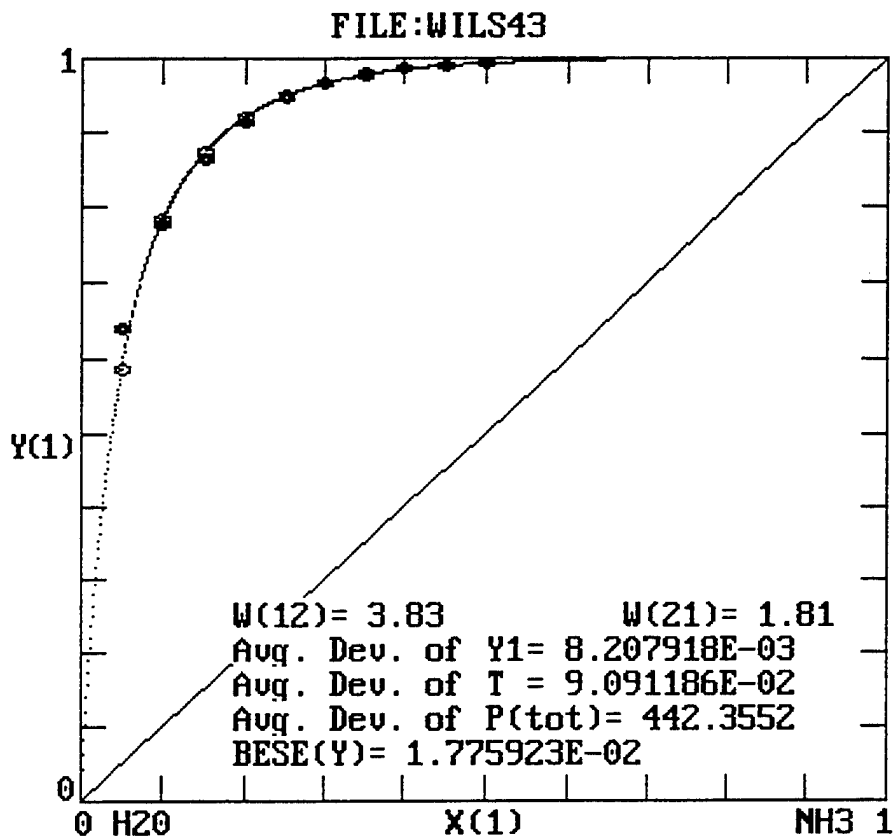
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0500	104.5	90.1	13.70	0.6730	0.6194	32.2	32.2	55.8
0.1000	162.9	162.6	0.20	0.8000	0.8026	32.2	32.2	130.5
0.1500	249.8	257.0	2.90	0.8800	0.8846	32.2	32.2	227.4
0.2000	384.2	377.1	1.90	0.9260	0.9282	32.2	32.2	350.0
0.2500	589.5	526.8	10.60	0.9553	0.9537	32.2	32.2	502.4
0.3000	891.0	710.8	20.20	0.9727	0.9696	32.2	32.2	689.2
0.3500	1317.7	934.1	29.10	0.9827	0.9798	32.2	32.2	915.2
0.4000	1879.3	1202.2	36.00	0.9890	0.9866	32.2	32.2	1186.1
0.4500	2576.4	1521.3	41.00	0.9925	0.9911	32.2	32.2	1507.7
0.5000	3378.0	1898.0	43.80	0.9949	0.9942	32.2	32.2	1886.9

W(12)= 5.096662 W(21)= 1.654338
 BESE(Y)= 0.0171 a.d.(Y1)= 0.0075
 a.d.ABS(Pt)= 386.8 a.d.REL(Pt)= 0.199
 R^2/N=0.00649 a.d.(T)= 0.09

FILE:WILS32

X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0500	104.5	87.4	16.30	0.6730	0.6076	32.2	32.2	53.1
0.1000	162.9	157.3	3.40	0.8000	0.7962	32.2	32.2	125.3
0.1500	249.8	249.4	0.10	0.8800	0.8813	32.2	32.2	219.8
0.2000	384.2	367.5	4.40	0.9260	0.9265	32.2	32.2	340.5
0.2500	589.5	515.8	12.50	0.9553	0.9529	32.2	32.2	491.5
0.3000	891.0	698.8	21.60	0.9727	0.9692	32.2	32.2	677.3
0.3500	1317.7	921.6	30.10	0.9827	0.9797	32.2	32.2	902.9
0.4000	1879.3	1189.9	36.70	0.9890	0.9866	32.2	32.2	1173.9
0.4500	2576.4	1509.7	41.40	0.9925	0.9911	32.2	32.2	1496.4
0.5000	3378.0	1887.8	44.10	0.9949	0.9942	32.2	32.2	1876.9

W(12)= 5.069483 W(21)= 1.719665
 BESE(Y)= 0.0208 a.d.(Y1)= 0.0084
 a.d.ABS(Pt)= 394.8 a.d.REL(Pt)= 0.211
 R^2/N=0.00737 a.d.(T)= 0.09



FILE:WILS43				Grid Search Wijs				
$X1(i)$	$Pt(i)$	$Pt(c)$	%dPt	$Y1(i)$	$Y1(c)$	$T(i)$	$T(c)$	$P1(c)$
0.0500	172.7	151.3	12.40	0.6409	0.5865	43.3	43.3	88.8
0.1000	265.8	268.9	1.20	0.7780	0.7826	43.3	43.3	210.4
0.1500	399.2	424.4	6.30	0.8620	0.8728	43.3	43.3	370.4
0.2000	602.0	623.5	3.60	0.9141	0.9211	43.3	43.3	574.3
0.2500	909.1	872.3	4.10	0.9471	0.9493	43.3	43.3	828.0
0.3000	1348.2	1176.9	12.70	0.9670	0.9667	43.3	43.3	1137.7
0.3500	1955.3	1543.8	21.00	0.9789	0.9778	43.3	43.3	1509.6
0.4000	2749.2	1979.5	28.00	0.9863	0.9852	43.3	43.3	1950.1
0.4500	3716.7	2490.3	33.00	0.9906	0.9901	43.3	43.3	2465.6
0.5000	4819.3	3082.6	36.00	0.9935	0.9934	43.3	43.3	3062.3
$W(12) = 3.83$				$W(21) = 1.81$				
$BESE(Y) = 0.0178$				a.d.(Y1) = 0.0082				
a.d.ABS(Pt) = 442.4				a.d.REL(Pt) = 0.158				
$R^2/N = 0.00312$				a.d.(T) = 0.09				

FILE:WILS43

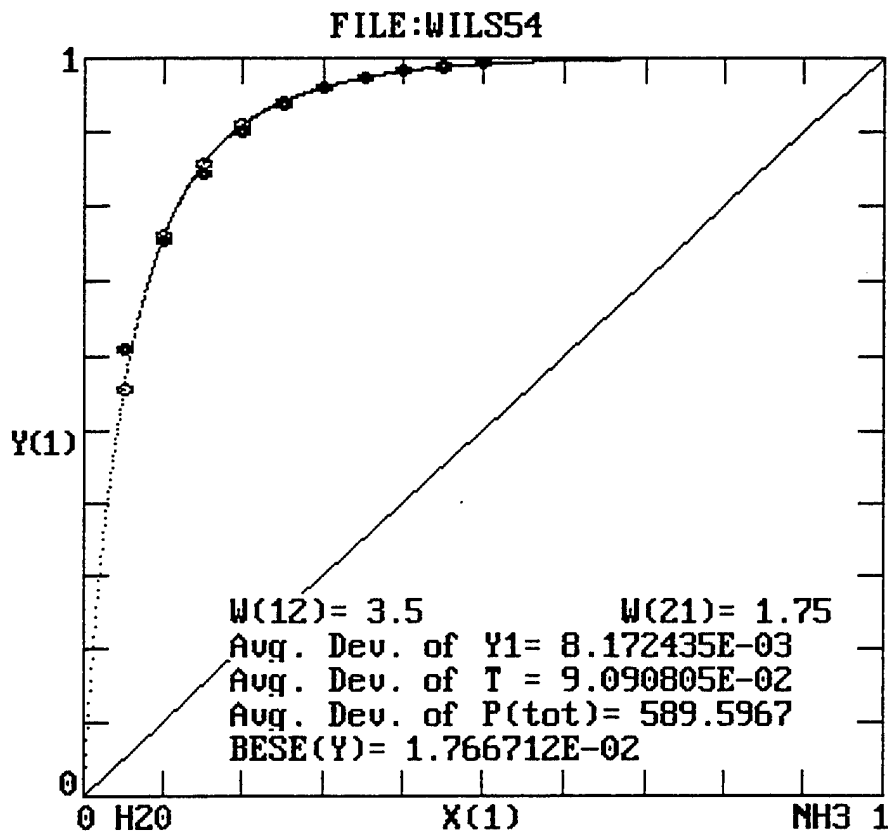
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0500	172.7	154.3	10.60	0.6409	0.5941	43.3	43.3	91.7
0.1000	265.8	268.0	0.80	0.7780	0.7809	43.3	43.3	209.3
0.1500	399.2	411.5	3.10	0.8620	0.8677	43.3	43.3	357.0
0.2000	602.0	589.5	2.10	0.9141	0.9154	43.3	43.3	539.6
0.2500	909.1	807.4	11.20	0.9471	0.9441	43.3	43.3	762.2
0.3000	1348.2	1071.1	20.60	0.9670	0.9624	43.3	43.3	1030.9
0.3500	1955.3	1387.3	29.00	0.9789	0.9745	43.3	43.3	1352.0
0.4000	2749.2	1763.4	35.90	0.9863	0.9827	43.3	43.3	1732.9
0.4500	3716.7	2207.5	40.60	0.9906	0.9884	43.3	43.3	2181.8
0.5000	4819.3	2728.6	43.40	0.9935	0.9923	43.3	43.3	2707.5

W(12)= 4.9655 W(21)= 1.472417
 BESE(Y)= 0.0152 a.d.(Y1)= 0.0076
 a.d.ABS(Pt)= 557.8 a.d.REL(Pt)= 0.197
 R^2/N=0.00784 a.d.(T)= 0.09

FILE:WILS43

X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0500	172.7	147.8	14.40	0.6409	0.5764	43.3	43.3	85.2
0.1000	265.8	255.5	3.90	0.7780	0.7705	43.3	43.3	196.8
0.1500	399.2	393.5	1.40	0.8620	0.8620	43.3	43.3	339.2
0.2000	602.0	566.9	5.80	0.9141	0.9124	43.3	43.3	517.3
0.2500	909.1	781.3	14.10	0.9471	0.9426	43.3	43.3	736.5
0.3000	1348.2	1042.6	22.70	0.9670	0.9617	43.3	43.3	1002.7
0.3500	1955.3	1357.7	30.60	0.9789	0.9743	43.3	43.3	1322.8
0.4000	2749.2	1734.0	36.90	0.9863	0.9827	43.3	43.3	1704.0
0.4500	3716.7	2179.7	41.40	0.9906	0.9884	43.3	43.3	2154.5
0.5000	4819.3	2703.8	43.90	0.9935	0.9924	43.3	43.3	2683.1

W(12)= 4.922926 W(21)= 1.567711
 BESE(Y)= 0.0208 a.d.(Y1)= 0.0095
 a.d.ABS(Pt)= 577.5 a.d.REL(Pt)= 0.215
 R^2/N=0.00925 a.d.(T)= 0.09



FILE:WILS54				Grid Search Wijs				
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0500	278.2	245.6	11.70	0.6100	0.5560	54.4	54.4	136.6
0.1000	417.3	422.2	1.20	0.7550	0.7584	54.4	54.4	320.2
0.1500	615.9	652.3	5.90	0.8440	0.8555	54.4	54.4	558.1
0.2000	913.8	943.6	3.30	0.9015	0.9087	54.4	54.4	857.5
0.2500	1354.9	1303.6	3.80	0.9382	0.9404	54.4	54.4	1226.0
0.3000	1978.1	1740.4	12.00	0.9605	0.9603	54.4	54.4	1671.4
0.3500	2821.0	2261.9	19.80	0.9745	0.9733	54.4	54.4	2201.4
0.4000	3907.0	2875.8	26.40	0.9831	0.9819	54.4	54.4	2823.7
0.4500	5215.9	3589.7	31.20	0.9884	0.9877	54.4	54.4	3545.7
0.5000	6697.1	4410.3	34.10	0.9918	0.9917	54.4	54.4	4373.9
W(12)= 3.5				W(21)= 1.75				
BESE(Y)= 0.0177				a.d.(Y1)= 0.0082				
a.d.ABS(Pt)= 589.6				a.d.REL(Pt)= 0.149				
R^2/N=0.00260				a.d.(T)= 0.09				

FILE:WILS54

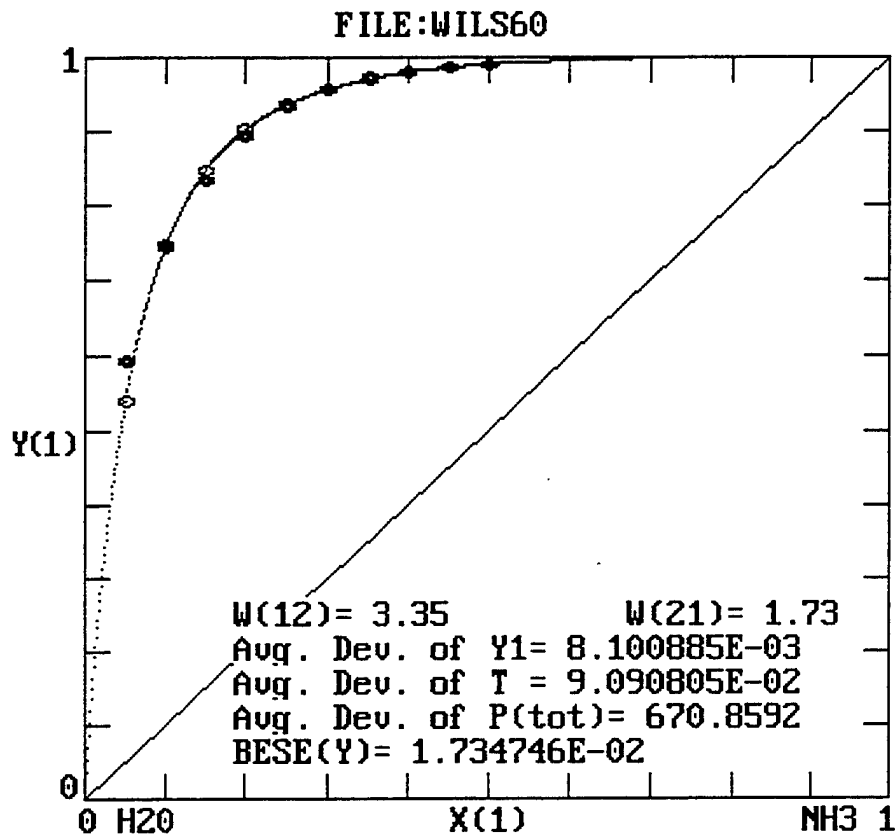
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0500	278.2	251.8	9.50	0.6100	0.5663	54.4	54.4	142.6
0.1000	417.3	422.5	1.20	0.7550	0.7574	54.4	54.4	320.0
0.1500	615.9	632.8	2.70	0.8440	0.8495	54.4	54.4	537.6
0.2000	913.8	889.0	2.70	0.9015	0.9015	54.4	54.4	801.4
0.2500	1354.9	1197.7	11.60	0.9382	0.9336	54.4	54.4	1118.3
0.3000	1978.1	1566.8	20.80	0.9605	0.9546	54.4	54.4	1495.6
0.3500	2821.0	2004.9	28.90	0.9745	0.9687	54.4	54.4	1942.1
0.4000	3907.0	2521.4	35.50	0.9831	0.9784	54.4	54.4	2467.1
0.4500	5215.9	3127.2	40.00	0.9884	0.9852	54.4	54.4	3081.0
0.5000	6697.1	3833.7	42.80	0.9918	0.9900	54.4	54.4	3795.5

W(12)= 4.816519 W(21)= 1.335784
 BESE(Y)= 0.0144 a.d.(Y1)= 0.0078
 a.d.ABS(Pt)= 779.6 a.d.REL(Pt)= 0.196
 R^2/N=0.00869 a.d.(T)= 0.09

FILE:WILS54

X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0500	278.2	241.5	13.20	0.6100	0.5480	54.4	54.4	132.4
0.1000	417.3	402.7	3.50	0.7550	0.7458	54.4	54.4	300.4
0.1500	615.9	604.7	1.80	0.8440	0.8429	54.4	54.4	509.7
0.2000	913.8	853.7	6.60	0.9015	0.8979	54.4	54.4	766.5
0.2500	1354.9	1156.8	14.60	0.9382	0.9318	54.4	54.4	1077.9
0.3000	1978.1	1522.1	23.10	0.9605	0.9537	54.4	54.4	1451.5
0.3500	2821.0	1958.2	30.60	0.9745	0.9683	54.4	54.4	1896.2
0.4000	3907.0	2474.9	36.70	0.9831	0.9784	54.4	54.4	2421.3
0.4500	5215.9	3082.8	40.90	0.9884	0.9853	54.4	54.4	3037.5
0.5000	6697.1	3793.6	43.40	0.9918	0.9901	54.4	54.4	3756.2

W(12)= 4.770706 W(21)= 1.432149
 BESE(Y)= 0.0202 a.d.(Y1)= 0.0105
 a.d.ABS(Pt)= 810.8 a.d.REL(Pt)= 0.214
 R^2/N=0.01027 a.d.(T)= 0.09



FILE:WILS60					Grid Search Wijs				
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)	
0.0500	346.5	308.7	10.90	0.5930	0.5400	60.0	60.0	166.7	
0.1000	516.1	522.2	1.20	0.7420	0.7455	60.0	60.0	389.3	
0.1500	756.6	798.8	5.60	0.8350	0.8461	60.0	60.0	675.9	
0.2000	1111.4	1147.1	3.20	0.8950	0.9021	60.0	60.0	1034.8	
0.2500	1631.1	1576.0	3.40	0.9331	0.9357	60.0	60.0	1474.6	
0.3000	2364.9	2094.1	11.50	0.9572	0.9569	60.0	60.0	2003.9	
0.3500	3350.1	2710.2	19.10	0.9721	0.9708	60.0	60.0	2631.1	
0.4000	4612.4	3432.8	25.60	0.9814	0.9801	60.0	60.0	3364.5	
0.4500	6114.8	4269.7	30.20	0.9871	0.9864	60.0	60.0	4211.9	
0.5000	7824.4	5228.0	33.20	0.9909	0.9908	60.0	60.0	5180.0	
$W(12) = 3.35$				$W(21) = 1.73$					
$BESE(Y) = 0.0173$				a.d.(Y1) = 0.0081					
a.d.ABS(Pt) = 670.9				a.d.REL(Pt) = 0.144					
$R^2/N = 0.00229$				a.d.(T) = 0.09					

FILE:WILS60

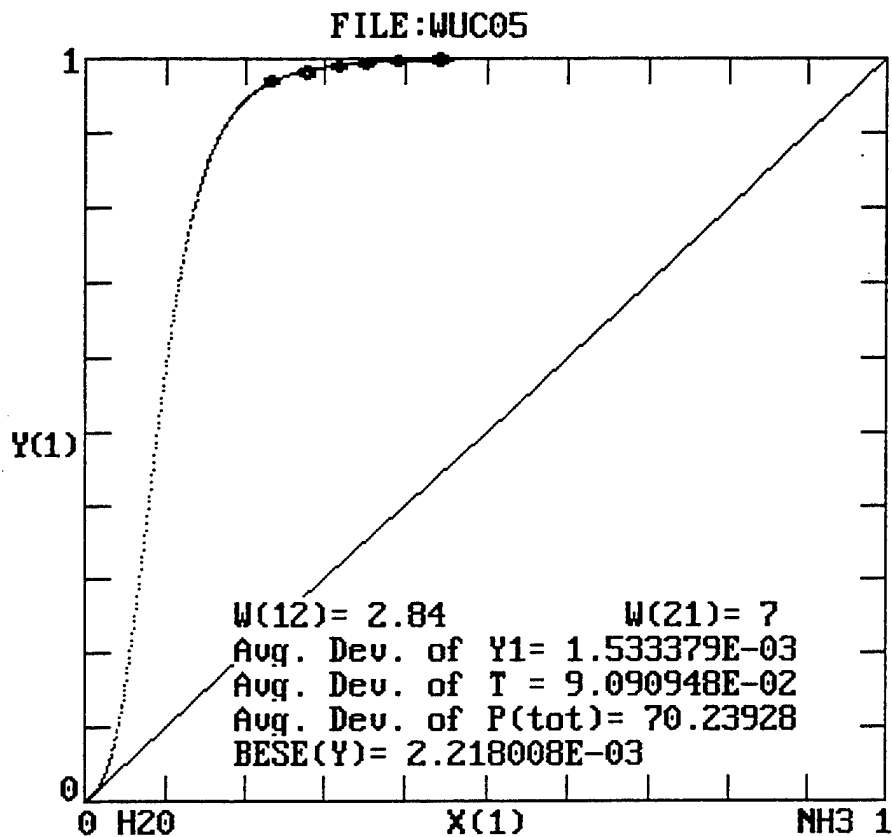
				f(S) Curved Fit Wijs				
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0500	346.5	317.2	8.40	0.5930	0.5516	60.0	60.0	175.0
0.1000	516.1	523.7	1.50	0.7420	0.7450	60.0	60.0	390.2
0.1500	756.6	775.8	2.50	0.8350	0.8399	60.0	60.0	651.6
0.2000	1111.4	1080.3	2.80	0.8950	0.8942	60.0	60.0	966.0
0.2500	1631.1	1445.1	11.40	0.9331	0.9281	60.0	60.0	1341.2
0.3000	2364.9	1878.8	20.60	0.9572	0.9504	60.0	60.0	1785.5
0.3500	3350.1	2391.2	28.60	0.9721	0.9655	60.0	60.0	2308.8
0.4000	4612.4	2993.1	35.10	0.9814	0.9761	60.0	60.0	2921.6
0.4500	6114.8	3696.7	39.50	0.9871	0.9835	60.0	60.0	3635.8
0.5000	7824.4	4514.9	42.30	0.9909	0.9888	60.0	60.0	4464.3

W(12) = 4.733871 W(21) = 1.281342
 BESE(Y) = 0.0138 a.d.(Y1) = 0.0079
 a.d.ABS(Pt) = 906.5 a.d.REL(Pt) = 0.193
 R^2/N = 0.00900 a.d.(T) = 0.09

FILE:WILS60

				f(S) Linear Fit Wijs				
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0500	346.5	305.6	11.80	0.5930	0.5348	60.0	60.0	163.4
0.1000	516.1	501.4	2.80	0.7420	0.7340	60.0	60.0	368.0
0.1500	756.6	744.0	1.70	0.8350	0.8334	60.0	60.0	620.1
0.2000	1111.4	1040.5	6.40	0.8950	0.8906	60.0	60.0	926.7
0.2500	1631.1	1398.9	14.20	0.9331	0.9262	60.0	60.0	1295.6
0.3000	2364.9	1828.3	22.70	0.9572	0.9494	60.0	60.0	1735.8
0.3500	3350.1	2338.4	30.20	0.9721	0.9652	60.0	60.0	2256.9
0.4000	4612.4	2940.3	36.30	0.9814	0.9760	60.0	60.0	2869.8
0.4500	6114.8	3646.2	40.40	0.9871	0.9836	60.0	60.0	3586.3
0.5000	7824.4	4468.9	42.90	0.9909	0.9889	60.0	60.0	4419.4

W(12) = 4.69074 W(21) = 1.369721
 BESE(Y) = 0.0192 a.d.(Y1) = 0.0105
 a.d.ABS(Pt) = 941.6 a.d.REL(Pt) = 0.209
 R^2/N = 0.01044 a.d.(T) = 0.09



FILE:RWU05					Grid Search Wijs			
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.2329	152.0	100.8	33.70	0.9687	0.9686	5.0	5.0	97.6
0.2792	228.0	171.4	24.80	0.9801	0.9847	5.0	5.0	168.8
0.3181	304.0	250.4	17.60	0.9886	0.9911	5.0	5.0	248.2
0.3507	380.0	331.3	12.80	0.9943	0.9942	5.0	5.0	329.3
0.3913	532.0	451.0	15.20	0.9972	0.9964	5.0	5.0	449.4
0.4418	760.0	629.7	17.10	0.9991	0.9980	5.0	5.0	628.4
W(12)= 2.84					W(21)= 7			
BESE(Y)= 0.0022					a.d.(Y1)= 0.0015			
a.d.ABS(Pt)= 70.2					a.d.REL(Pt)= 0.202			
R^2/N=0.04775					a.d.(T)= 0.09			

FILE:RWU05

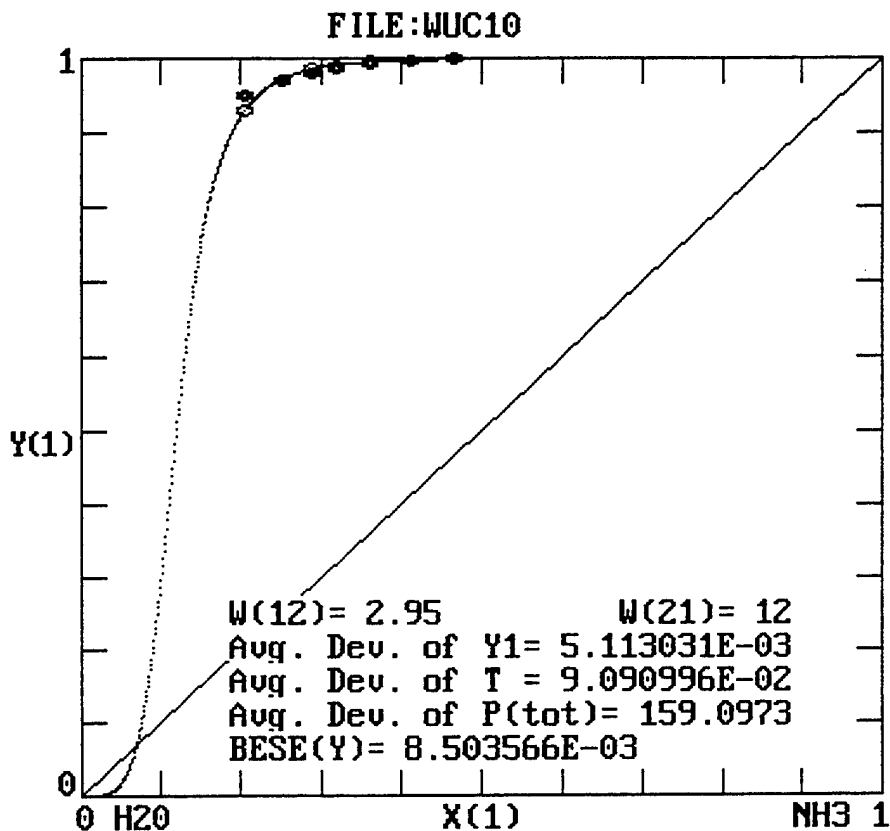
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.2329	152.0	138.1	9.20	0.9687	0.9684	5.0	5.0	133.7
0.2792	228.0	195.1	14.40	0.9801	0.9802	5.0	5.0	191.3
0.3181	304.0	254.0	16.50	0.9886	0.9865	5.0	5.0	250.6
0.3507	380.0	311.8	17.90	0.9943	0.9901	5.0	5.0	308.7
0.3913	532.0	395.9	25.60	0.9972	0.9932	5.0	5.0	393.2
0.4418	760.0	521.0	31.50	0.9991	0.9958	5.0	5.0	518.8

W(12) = 5.355826 W(21) = 2.375887
 BESE(Y) = 0.0029 a.d.(Y1) = 0.0024
 a.d.ABS(Pt) = 90.0 a.d.REL(Pt) = 0.192
 R²/N = 0.19580 a.d.(T) = 0.09

FILE:RWU05

X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.2329	152.0	146.7	3.50	0.9687	0.9698	5.0	5.0	142.3
0.2792	228.0	204.7	10.20	0.9801	0.9808	5.0	5.0	200.8
0.3181	304.0	264.0	13.20	0.9886	0.9867	5.0	5.0	260.4
0.3507	380.0	321.9	15.30	0.9943	0.9901	5.0	5.0	318.7
0.3913	532.0	405.7	23.70	0.9972	0.9932	5.0	5.0	403.0
0.4418	760.0	530.1	30.30	0.9991	0.9957	5.0	5.0	527.8

W(12) = 5.422969 W(21) = 2.166926
 BESE(Y) = 0.0029 a.d.(Y1) = 0.0026
 a.d.ABS(Pt) = 80.5 a.d.REL(Pt) = 0.160
 R²/N = 0.19921 a.d.(T) = 0.09



FILE:RWU10					Grid Search Wijs			
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.2050	152.0	53.1	65.10	0.9498	0.9284	10.0	10.0	49.3
0.2504	228.0	107.3	52.90	0.9687	0.9716	10.0	10.0	104.3
0.2874	304.0	172.8	43.20	0.9801	0.9853	10.0	10.0	170.2
0.3181	380.0	243.0	36.10	0.9877	0.9910	10.0	10.0	240.8
0.3619	532.0	369.4	30.60	0.9934	0.9952	10.0	10.0	367.6
0.4136	760.0	559.2	26.40	0.9981	0.9976	10.0	10.0	557.9
0.4670	1064.0	801.4	24.70	0.9995	0.9987	10.0	10.0	800.4
W(12)= 2.95					W(21)= 12			
BESE(Y)= 0.0085					a.d.(Y1)= 0.0051			
a.d.ABS(Pt)= 159.1					a.d.REL(Pt)= 0.398			
R^2/N=0.06879					a.d.(T)= 0.09			

FILE:RWU10

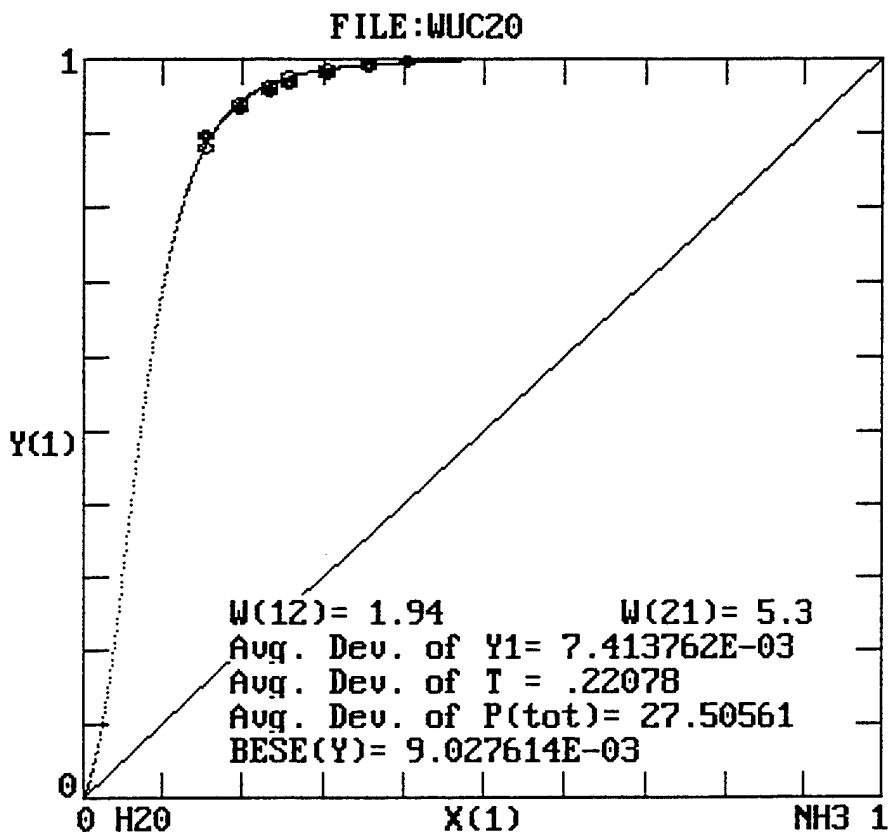
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.2050	152.0	141.6	6.80	0.9498	0.9531	10.0	10.0	135.0
0.2504	228.0	201.1	11.80	0.9687	0.9704	10.0	10.0	195.1
0.2874	304.0	260.4	14.40	0.9801	0.9793	10.0	10.0	255.0
0.3181	380.0	317.8	16.40	0.9877	0.9845	10.0	10.0	312.8
0.3619	532.0	413.9	22.20	0.9934	0.9896	10.0	10.0	409.6
0.4136	760.0	551.5	27.40	0.9981	0.9935	10.0	10.0	547.9
0.4670	1064.0	724.6	31.90	0.9995	0.9960	10.0	10.0	721.7

W(12)= 5.313761 W(21)= 2.205537
 BESE(Y)= 0.0032 a.d.(Y1)= 0.0030
 a.d.ABS(Pt)= 115.6 a.d.REL(Pt)= 0.187
 R^2/N=0.26360 a.d.(T)= 0.09

FILE:RWU10

X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.2050	152.0	148.1	2.60	0.9498	0.9548	10.0	10.0	141.4
0.2504	228.0	208.4	8.60	0.9687	0.9711	10.0	10.0	202.4
0.2874	304.0	268.2	11.80	0.9801	0.9796	10.0	10.0	262.8
0.3181	380.0	325.9	14.20	0.9877	0.9846	10.0	10.0	320.9
0.3619	532.0	422.2	20.60	0.9934	0.9896	10.0	10.0	417.8
0.4136	760.0	559.4	26.40	0.9981	0.9935	10.0	10.0	555.7
0.4670	1064.0	731.6	31.20	0.9995	0.9960	10.0	10.0	728.7

W(12)= 5.357194 W(21)= 2.07638
 BESE(Y)= 0.0036 a.d.(Y1)= 0.0033
 a.d.ABS(Pt)= 108.0 a.d.REL(Pt)= 0.165
 R^2/N=0.26734 a.d.(T)= 0.09



FILE:RWU20				Grid Search Wijs				
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.1532	152.0	103.4	32.00	0.8983	0.8796	20.0	20.0	90.9
0.1957	228.0	182.0	20.20	0.9345	0.9401	20.0	20.0	171.1
0.2319	304.0	276.0	9.20	0.9564	0.9650	20.0	20.0	266.3
0.2586	380.0	362.5	4.60	0.9669	0.9757	20.0	20.0	353.7
0.3027	532.0	538.7	1.30	0.9811	0.9860	20.0	20.0	531.2
0.3548	760.0	800.7	5.40	0.9896	0.9923	20.0	20.0	794.5
0.4035	1064.0	1058.9	0.50	0.9981	0.9955	20.0	19.0	1054.2

W(12)= 1.94 W(21)= 5.3

BESE(Y)= 0.0090 a.d.(Y1)= 0.0074

a.d.ABS(Pt)= 27.5 a.d.REL(Pt)= 0.104

R^2/N=0.05919 a.d.(T)= 0.22

FILE:RWU20

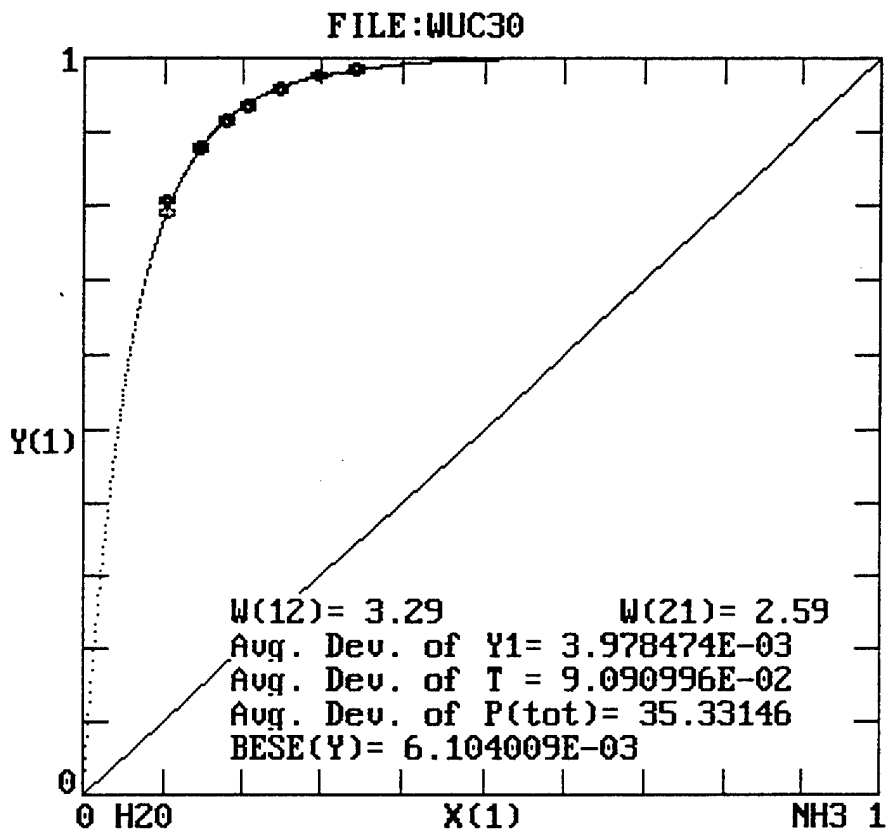
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.1532	152.0	149.5	1.70	0.8983	0.9049	20.0	20.0	135.3
0.1957	228.0	212.9	6.60	0.9345	0.9385	20.0	20.0	199.8
0.2319	304.0	278.7	8.30	0.9564	0.9565	20.0	20.0	266.6
0.2586	380.0	334.8	11.90	0.9669	0.9660	20.0	20.0	323.5
0.3027	532.0	443.4	16.70	0.9811	0.9771	20.0	20.0	433.3
0.3548	760.0	600.0	21.10	0.9896	0.9855	20.0	20.0	591.3
0.4035	1064.0	777.9	26.90	0.9981	0.9905	20.0	20.0	770.5

W(12) = 5.222683 W(21) = 1.92062
 BESE(Y) = 0.0046 a.d.(Y1) = 0.0039
 a.d.ABS(Pt) = 89.0 a.d.REL(Pt) = 0.133
 R²/N = 0.14128 a.d.(T) = 0.09

FILE:RWU20

X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.1532	152.0	150.4	1.00	0.8983	0.9054	20.0	20.0	136.2
0.1957	228.0	214.1	6.10	0.9345	0.9388	20.0	20.0	200.9
0.2319	304.0	280.0	7.90	0.9564	0.9567	20.0	20.0	267.8
0.2586	380.0	336.2	11.50	0.9669	0.9661	20.0	20.0	324.8
0.3027	532.0	444.9	16.40	0.9811	0.9772	20.0	20.0	434.7
0.3548	760.0	601.5	20.90	0.9896	0.9855	20.0	20.0	592.8
0.4035	1064.0	779.4	26.70	0.9981	0.9905	20.0	20.0	772.0

W(12) = 5.227474 W(21) = 1.906681
 BESE(Y) = 0.0048 a.d.(Y1) = 0.0040
 a.d.ABS(Pt) = 87.6 a.d.REL(Pt) = 0.129
 R²/N = 0.14138 a.d.(T) = 0.09



FILE:RWU30				Grid Search Wijs				
$X_1(i)$	$Pt(i)$	$Pt(c)$	%dPt	$Y_1(i)$	$Y_1(c)$	$T(i)$	$T(c)$	$P_1(c)$
0.1031	152.0	132.8	12.60	0.8059	0.7910	30.0	30.0	105.0
0.1469	228.0	212.5	6.80	0.8781	0.8796	30.0	30.0	186.9
0.1781	304.0	285.8	6.00	0.9126	0.9162	30.0	30.0	261.8
0.2050	380.0	361.3	4.90	0.9336	0.9376	30.0	30.0	338.7
0.2483	532.0	508.6	4.40	0.9583	0.9602	30.0	30.0	488.4
0.2976	760.0	718.8	5.40	0.9754	0.9754	30.0	30.0	701.1
0.3425	1064.0	952.9	10.40	0.9858	0.9838	30.0	30.0	937.5
$W(12) = 3.29$				$W(21) = 2.59$				
$BESE(Y) = 0.0061$				a.d.(Y_1) = 0.0040				
a.d.ABS(Pt) = 35.3				a.d.REL(Pt) = 0.072				
$R^2/N = 0.00232$				a.d.(T) = 0.09				

FILE:RWU30

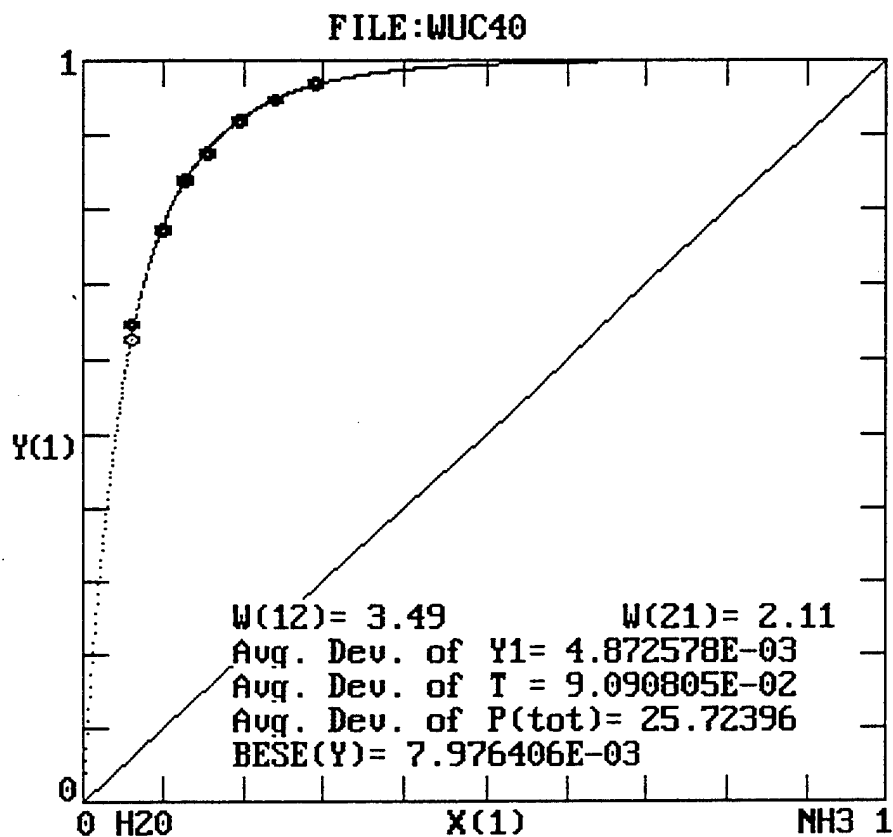
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.1031	152.0	151.1	0.60	0.8059	0.8136	30.0	30.0	123.0
0.1469	228.0	226.9	0.50	0.8781	0.8842	30.0	30.0	200.6
0.1781	304.0	291.9	4.00	0.9126	0.9148	30.0	30.0	267.0
0.2050	380.0	356.0	6.30	0.9336	0.9337	30.0	30.0	332.4
0.2483	532.0	476.9	10.40	0.9583	0.9548	30.0	30.0	455.3
0.2976	760.0	643.9	15.30	0.9754	0.9703	30.0	30.0	624.8
0.3425	1064.0	827.0	22.30	0.9858	0.9795	30.0	30.0	810.0

W(12)= 5.120717 W(21)= 1.69672
 BESE(Y)= 0.0050 a.d.(Y1)= 0.0044
 a.d.ABS(Pt)= 63.8 a.d.REL(Pt)= 0.085
 R^2/N=0.01154 a.d.(T)= 0.09

FILE:RWU30

X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.1031	152.0	147.0	3.30	0.8059	0.8085	30.0	30.0	118.8
0.1469	228.0	221.2	3.00	0.8781	0.8814	30.0	30.0	194.9
0.1781	304.0	285.2	6.20	0.9126	0.9130	30.0	30.0	260.4
0.2050	380.0	348.6	8.30	0.9336	0.9325	30.0	30.0	325.1
0.2483	532.0	468.4	11.90	0.9583	0.9542	30.0	30.0	447.0
0.2976	760.0	634.7	16.50	0.9754	0.9700	30.0	30.0	615.7
0.3425	1064.0	817.5	23.20	0.9858	0.9794	30.0	30.0	800.7

W(12)= 5.098112 W(21)= 1.751808
 BESE(Y)= 0.0039 a.d.(Y1)= 0.0033
 a.d.ABS(Pt)= 71.1 a.d.REL(Pt)= 0.103
 R^2/N=0.01179 a.d.(T)= 0.09



FILE:RWU40				Grid Search Wijs				
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0601	152.0	138.9	8.60	0.6469	0.6268	40.0	40.0	87.1
0.0989	228.0	217.6	4.60	0.7711	0.7748	40.0	40.0	168.6
0.1282	304.0	292.1	3.90	0.8378	0.8401	40.0	40.0	245.4
0.1532	380.0	366.9	3.50	0.8743	0.8782	40.0	40.0	322.2
0.1947	532.0	516.0	3.00	0.9183	0.9202	40.0	40.0	474.9
0.2401	760.0	718.5	5.50	0.9479	0.9481	40.0	40.0	681.3
0.2894	1064.0	989.9	7.00	0.9687	0.9667	40.0	40.0	956.9
W(12)= 3.49				W(21)= 2.11				
BESE(Y)= 0.0080				a.d.(Y1)= 0.0049				
a.d.ABS(Pt)= 25.7				a.d.REL(Pt)= 0.051				
R^2/N=0.00083				a.d.(T)= 0.09				

FILE:RWU40

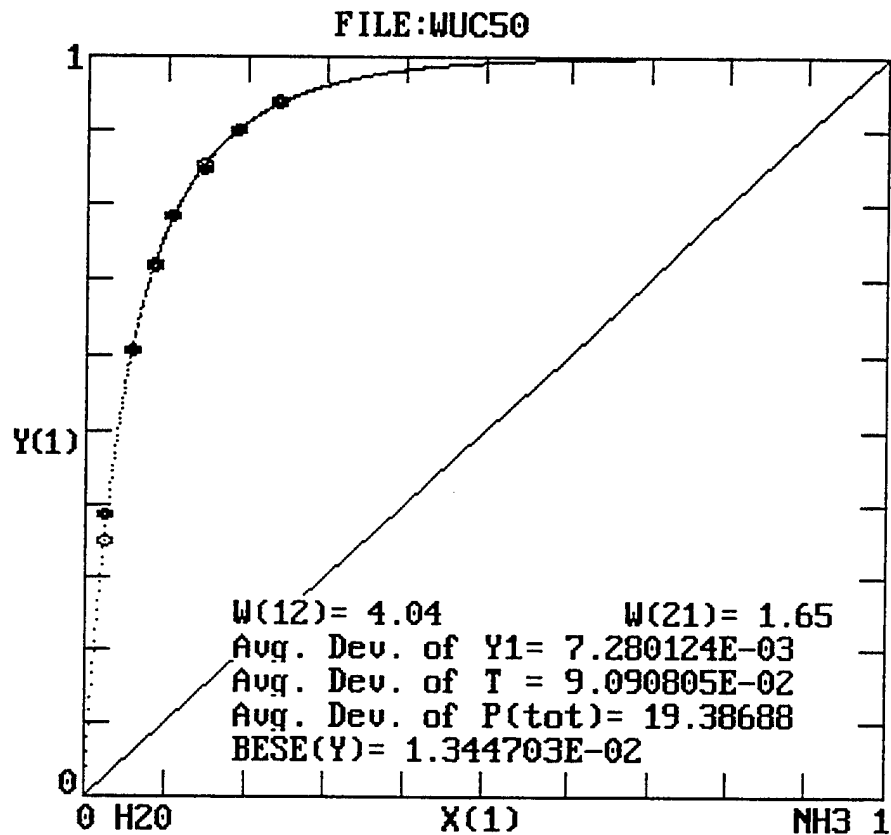
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0601	152.0	150.4	1.00	0.6469	0.6543	40.0	40.0	98.4
0.0989	228.0	229.7	0.70	0.7711	0.7850	40.0	40.0	180.3
0.1282	304.0	300.3	1.20	0.8378	0.8425	40.0	40.0	253.0
0.1532	380.0	368.5	3.00	0.8743	0.8767	40.0	40.0	323.1
0.1947	532.0	499.7	6.10	0.9183	0.9155	40.0	40.0	457.5
0.2401	760.0	671.8	11.60	0.9479	0.9425	40.0	40.0	633.2
0.2894	1064.0	897.1	15.70	0.9687	0.9615	40.0	40.0	862.5

W(12)= 5.006264 W(21)= 1.521318
 BESE(Y)= 0.0072 a.d.(Y1)= 0.0063
 a.d.ABS(Pt)= 43.7 a.d.REL(Pt)= 0.056
 R²/N=0.00448 a.d.(T)= 0.09

FILE:RWU40

X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0601	152.0	144.1	5.20	0.6469	0.6393	40.0	40.0	92.1
0.0989	228.0	219.5	3.70	0.7711	0.7752	40.0	40.0	170.2
0.1282	304.0	287.4	5.50	0.8378	0.8357	40.0	40.0	240.2
0.1532	380.0	353.5	7.00	0.8743	0.8718	40.0	40.0	308.2
0.1947	532.0	481.6	9.50	0.9183	0.9126	40.0	40.0	439.5
0.2401	760.0	650.9	14.40	0.9479	0.9410	40.0	40.0	612.5
0.2894	1064.0	874.0	17.90	0.9687	0.9608	40.0	40.0	839.8

W(12)= 4.966953 W(21)= 1.611134
 BESE(Y)= 0.0057 a.d.(Y1)= 0.0053
 a.d.ABS(Pt)= 58.4 a.d.REL(Pt)= 0.090
 R²/N=0.00530 a.d.(T)= 0.09



FILE:RWU50					Grid Search Wijs			
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0232	152.0	140.0	7.90	0.3862	0.3517	50.0	50.0	49.2
0.0569	228.0	221.3	2.90	0.6065	0.6057	50.0	50.0	134.0
0.0842	304.0	299.5	1.50	0.7166	0.7189	50.0	50.0	215.3
0.1073	380.0	375.1	1.30	0.7817	0.7828	50.0	50.0	293.6
0.1469	532.0	526.7	1.00	0.8474	0.8546	50.0	50.0	450.1
0.1884	760.0	718.3	5.50	0.8992	0.9008	50.0	50.0	647.1
0.2391	1064.0	1003.4	5.70	0.9393	0.9358	50.0	50.0	939.0
W(12)= 4.04					W(21)= 1.65			
BESE(Y)= 0.0134					a.d.(Y1)= 0.0073			
a.d.ABS(Pt)= 19.4					a.d.REL(Pt)= 0.037			
R^2/N=0.00088					a.d.(T)= 0.09			

FILE:RWU50

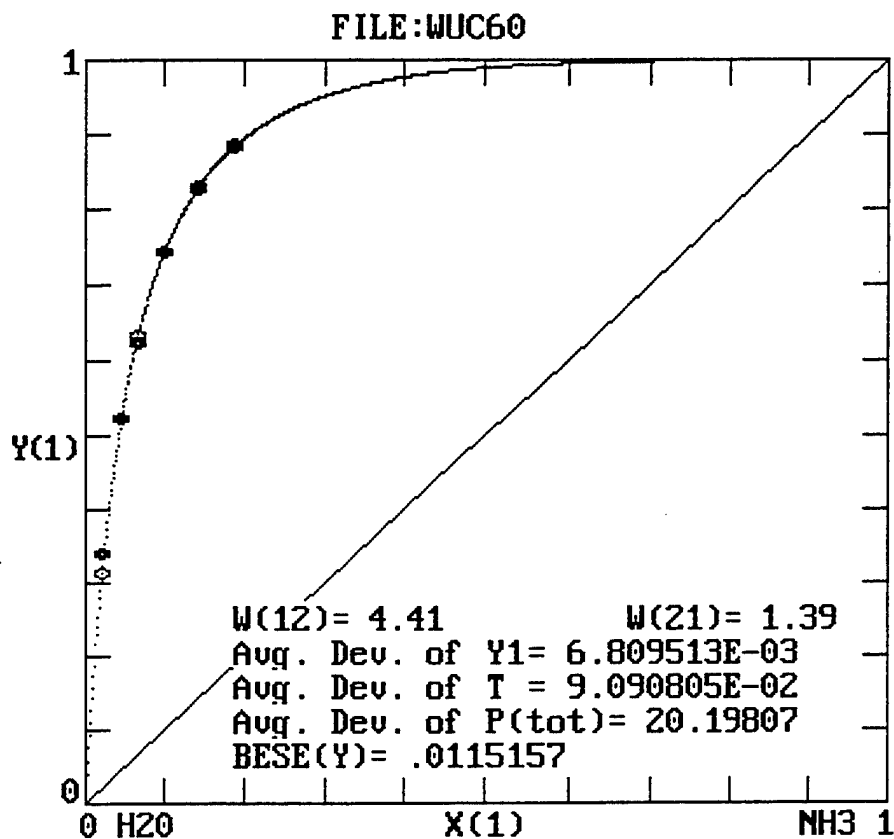
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0232	152.0	143.1	5.90	0.3862	0.3655	50.0	50.0	52.3
0.0569	228.0	226.7	0.60	0.6065	0.6147	50.0	50.0	139.4
0.0842	304.0	304.7	0.20	0.7166	0.7231	50.0	50.0	220.4
0.1073	380.0	378.6	0.40	0.7817	0.7840	50.0	50.0	296.9
0.1469	532.0	523.6	1.60	0.8474	0.8528	50.0	50.0	446.5
0.1884	760.0	702.8	7.50	0.8992	0.8977	50.0	50.0	630.9
0.2391	1064.0	965.0	9.30	0.9393	0.9323	50.0	50.0	899.7

W(12)= 4.877844 W(21)= 1.385117
 BESE(Y)= 0.0094 a.d.(Y1)= 0.0074
 a.d.ABS(Pt)= 25.3 a.d.REL(Pt)= 0.036
 R^2/N=0.00135 a.d.(T)= 0.09

FILE:RWU50

X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0232	152.0	138.9	8.60	0.3862	0.3465	50.0	50.0	48.1
0.0569	228.0	216.7	5.00	0.6065	0.5970	50.0	50.0	129.3
0.0842	304.0	290.2	4.50	0.7166	0.7094	50.0	50.0	205.9
0.1073	380.0	360.4	5.20	0.7817	0.7734	50.0	50.0	278.7
0.1469	532.0	499.6	6.10	0.8474	0.8461	50.0	50.0	422.7
0.1884	760.0	673.6	11.40	0.8992	0.8937	50.0	50.0	601.9
0.2391	1064.0	930.5	12.50	0.9393	0.9303	50.0	50.0	865.6

W(12)= 4.83192 W(21)= 1.483979
 BESE(Y)= 0.0165 a.d.(Y1)= 0.0115
 a.d.ABS(Pt)= 44.3 a.d.REL(Pt)= 0.076
 R^2/N=0.00256 a.d.(T)= 0.09



FILE:RWU60				Grid Search Wijs				
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0211	228.0	214.0	6.20	0.3395	0.3135	60.0	60.0	67.1
0.0464	304.0	299.7	1.40	0.5240	0.5236	60.0	60.0	156.9
0.0675	380.0	379.4	0.20	0.6223	0.6331	60.0	60.0	240.2
0.0999	532.0	517.4	2.80	0.7429	0.7421	60.0	60.0	383.9
0.1427	760.0	731.5	3.80	0.8272	0.8287	60.0	60.0	606.2
0.1884	1064.0	1004.9	5.60	0.8858	0.8844	60.0	60.0	888.7

W(12)= 4.41 W(21)= 1.39

BESE(Y)= 0.0115 a.d.(Y1)= 0.0068

a.d.ABS(Pt)= 20.2 a.d.REL(Pt)= 0.033

R^2/N=0.00035 a.d.(T)= 0.09

FILE:RWU60

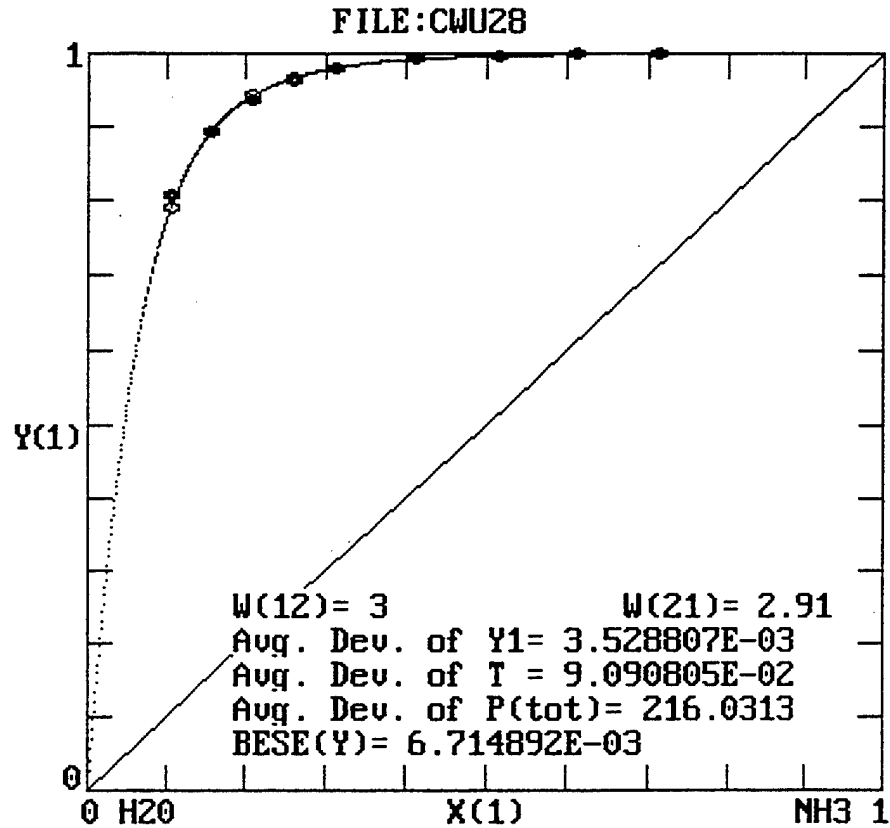
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0211	228.0	216.2	5.20	0.3395	0.3205	60.0	60.0	69.3
0.0464	304.0	303.9	0.00	0.5240	0.5301	60.0	60.0	161.1
0.0675	380.0	384.7	1.20	0.6223	0.6380	60.0	60.0	245.4
0.0999	532.0	523.3	1.60	0.7429	0.7447	60.0	60.0	389.7
0.1427	760.0	735.9	3.20	0.8272	0.8293	60.0	60.0	610.3
0.1884	1064.0	1004.6	5.60	0.8858	0.8839	60.0	60.0	888.0

W(12)= 4.733871 W(21)= 1.281342
 BESE(Y)= 0.0104 a.d.(Y1)= 0.0078
 a.d.ABS(Pt)= 18.1 a.d.REL(Pt)= 0.028
 R^2/N=0.00043 a.d.(T)= 0.09

FILE:RWU60

X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0211	228.0	211.2	7.40	0.3395	0.3046	60.0	60.0	64.3
0.0464	304.0	293.1	3.60	0.5240	0.5129	60.0	60.0	150.4
0.0675	380.0	369.3	2.80	0.6223	0.6230	60.0	60.0	230.1
0.0999	532.0	501.0	5.80	0.7429	0.7337	60.0	60.0	367.6
0.1427	760.0	705.4	7.20	0.8272	0.8223	60.0	60.0	580.1
0.1884	1064.0	966.5	9.20	0.8858	0.8798	60.0	60.0	850.3

W(12)= 4.69074 W(21)= 1.369721
 BESE(Y)= 0.0158 a.d.(Y1)= 0.0111
 a.d.ABS(Pt)= 36.9 a.d.REL(Pt)= 0.060
 R^2/N=0.00098 a.d.(T)= 0.09



FILE: CWU28					Grid Search Wijs			
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.1052	152.0	118.8	21.80	0.8080	0.7891	28.4	28.4	93.7
0.1573	228.0	211.7	7.10	0.8930	0.8935	28.4	28.4	189.2
0.2091	380.0	345.4	9.10	0.9360	0.9422	28.4	28.4	325.5
0.2607	532.0	525.6	1.20	0.9640	0.9668	28.4	28.4	508.2
0.3119	760.0	755.7	0.60	0.9790	0.9802	28.4	28.4	740.7
0.4136	1520.0	1379.5	9.20	0.9920	0.9923	28.4	28.4	1368.9
0.5141	2660.0	2228.3	16.20	0.9980	0.9969	28.4	28.4	2221.4
0.6134	3800.0	3294.7	13.30	0.9990	0.9987	28.4	28.4	3290.5
0.7117	5320.0	4547.9	14.50	0.9990	0.9995	28.4	28.4	4545.7
W(12)= 3					W(21)= 2.91			
BESE(Y)= 0.0067					a.d.(Y1)= 0.0035			
a.d.ABS(Pt)= 216.0					a.d.REL(Pt)= 0.103			
R^2/N=0.01297					a.d.(T)= 0.09			

FILE: CWU28

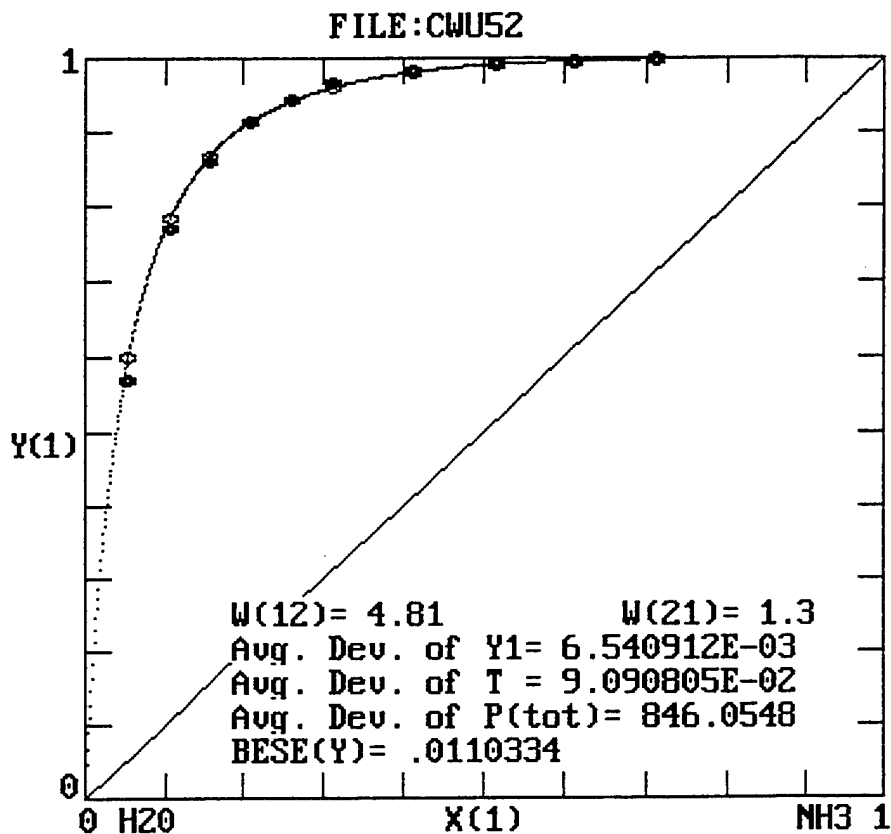
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.1052	152.0	142.9	6.00	0.8080	0.8209	28.4	28.4	117.3
0.1573	228.0	230.2	1.00	0.8930	0.8979	28.4	28.4	206.7
0.2091	380.0	342.4	9.90	0.9360	0.9378	28.4	28.4	321.1
0.2607	532.0	483.4	9.10	0.9640	0.9606	28.4	28.4	464.3
0.3119	760.0	656.7	13.60	0.9790	0.9745	28.4	28.4	640.0
0.4136	1520.0	1120.2	26.30	0.9920	0.9891	28.4	28.4	1107.9
0.5141	2660.0	1771.6	33.40	0.9980	0.9954	28.4	28.4	1763.4
0.6134	3800.0	2654.9	30.10	0.9990	0.9982	28.4	28.4	2650.1
0.7117	5320.0	3815.6	28.30	0.9990	0.9994	28.4	28.4	3813.2

W(12) = 5.137831 W(21) = 1.729003
 BESE(Y) = 0.0052 a.d.(Y1) = 0.0038
 a.d.ABS(Pt) = 459.8 a.d.REL(Pt) = 0.175
 R²/N = 0.03306 a.d.(T) = 0.09

FILE: CWU28

X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.1052	152.0	139.6	8.10	0.8080	0.8168	28.4	28.4	114.0
0.1573	228.0	225.5	1.10	0.8930	0.8959	28.4	28.4	202.0
0.2091	380.0	336.4	11.50	0.9360	0.9368	28.4	28.4	315.2
0.2607	532.0	476.6	10.40	0.9640	0.9602	28.4	28.4	457.6
0.3119	760.0	649.4	14.50	0.9790	0.9744	28.4	28.4	632.8
0.4136	1520.0	1112.9	26.80	0.9920	0.9891	28.4	28.4	1100.8
0.5141	2660.0	1765.9	33.60	0.9980	0.9954	28.4	28.4	1757.8
0.6134	3800.0	2651.9	30.20	0.9990	0.9982	28.4	28.4	2647.1
0.7117	5320.0	3815.7	28.30	0.9990	0.9994	28.4	28.4	3813.4

W(12) = 5.118877 W(21) = 1.775616
 BESE(Y) = 0.0039 a.d.(Y1) = 0.0031
 a.d.ABS(Pt) = 464.2 a.d.REL(Pt) = 0.183
 R²/N = 0.03247 a.d.(T) = 0.09



FILE: CWU52				Grid Search Wijs				
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0527	228.0	246.2	8.00	0.5700	0.6009	52.3	52.3	147.9
0.1052	380.0	423.7	11.50	0.7700	0.7832	52.3	52.3	331.8
0.1573	608.0	641.1	5.50	0.8610	0.8674	52.3	52.3	556.1
0.2091	912.0	904.6	0.80	0.9150	0.9140	52.3	52.3	826.8
0.2607	1368.0	1221.2	10.70	0.9440	0.9424	52.3	52.3	1150.8
0.3119	1900.0	1596.6	16.00	0.9660	0.9607	52.3	52.3	1533.9
0.4136	3420.0	2559.8	25.20	0.9840	0.9815	52.3	52.3	2512.4
0.5141	5320.0	3864.4	27.40	0.9920	0.9915	52.3	52.3	3831.5
0.6134	8360.0	5589.5	33.10	0.9940	0.9964	52.3	52.3	5569.3
0.7117	10636.0	7814.4	26.50	0.9970	0.9987	52.3	52.3	7804.1
$W(12) = 4.81$				$W(21) = 1.3$				
$BESE(Y) = 0.0110$				a.d.(Y1) = 0.0065				
a.d.ABS(Pt) = 846.1				a.d.REL(Pt) = 0.165				
$R^2/N = 0.01191$				a.d.(T) = 0.09				

FILE: CWU52

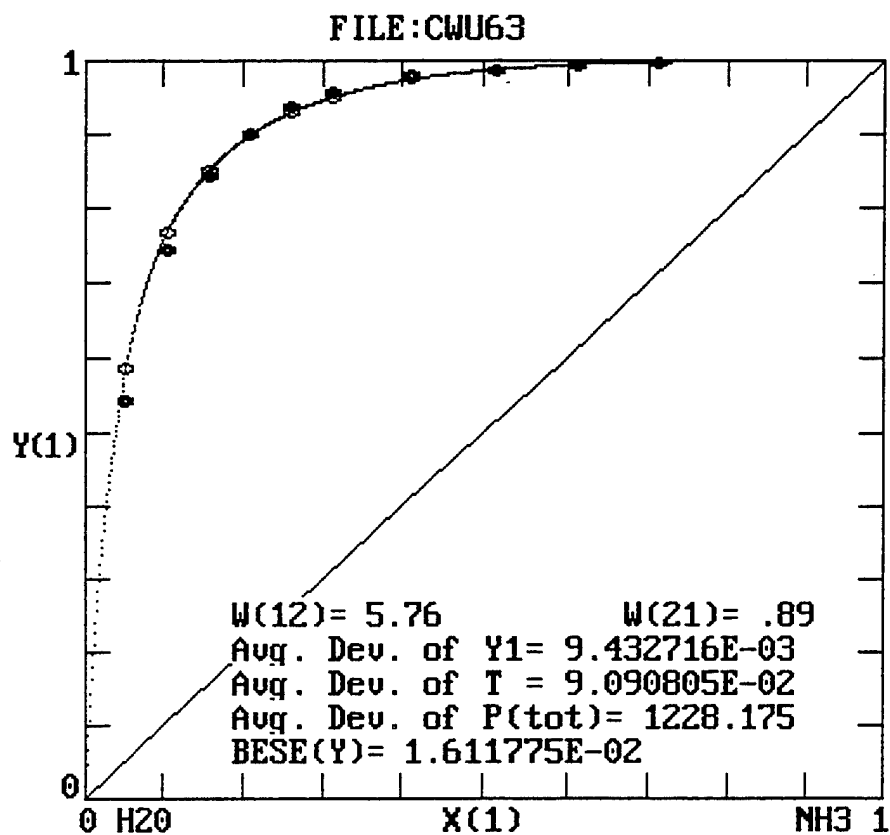
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0527	228.0	237.8	4.30	0.5700	0.5869	52.3	52.3	139.5
0.1052	380.0	407.1	7.10	0.7700	0.7745	52.3	52.3	315.3
0.1573	608.0	616.7	1.40	0.8610	0.8623	52.3	52.3	531.8
0.2091	912.0	872.8	4.30	0.9150	0.9111	52.3	52.3	795.2
0.2607	1368.0	1182.6	13.60	0.9440	0.9408	52.3	52.3	1112.6
0.3119	1900.0	1552.0	18.30	0.9660	0.9599	52.3	52.3	1489.8
0.4136	3420.0	2506.0	26.70	0.9840	0.9813	52.3	52.3	2459.2
0.5141	5320.0	3805.9	28.50	0.9920	0.9915	52.3	52.3	3773.6
0.6134	8360.0	5531.7	33.80	0.9940	0.9964	52.3	52.3	5511.9
0.7117	10636.0	7763.5	27.00	0.9970	0.9987	52.3	52.3	7753.4

W(12) = 4.846447 W(21) = 1.358803
 BESE(Y) = 0.0062 a.d.(Y1) = 0.0043
 a.d.ABS(Pt) = 874.7 a.d.REL(Pt) = 0.165
 R^2/N = 0.01236 a.d.(T) = 0.09

FILE: CWU52

X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0527	228.0	227.6	0.20	0.5700	0.5687	52.3	52.3	129.5
0.1052	380.0	387.7	2.00	0.7700	0.7636	52.3	52.3	296.0
0.1573	608.0	589.2	3.10	0.8610	0.8563	52.3	52.3	504.5
0.2091	912.0	838.6	8.10	0.9150	0.9079	52.3	52.3	761.4
0.2607	1368.0	1143.3	16.40	0.9440	0.9392	52.3	52.3	1073.8
0.3119	1900.0	1509.5	20.60	0.9660	0.9592	52.3	52.3	1447.8
0.4136	3420.0	2462.8	28.00	0.9840	0.9813	52.3	52.3	2416.8
0.5141	5320.0	3769.9	29.10	0.9920	0.9916	52.3	52.3	3738.3
0.6134	8360.0	5509.3	34.10	0.9940	0.9965	52.3	52.3	5490.1
0.7117	10636.0	7757.5	27.10	0.9970	0.9988	52.3	52.3	7747.9

W(12) = 4.800361 W(21) = 1.456814
 BESE(Y) = 0.0045 a.d.(Y1) = 0.0038
 a.d.ABS(Pt) = 895.2 a.d.REL(Pt) = 0.169
 R^2/N = 0.01394 a.d.(T) = 0.09



FILE: CWU63				Grid Search Wijs				
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0527	380.0	399.4	5.10	0.5430	0.5877	63.3	63.3	234.7
0.1052	608.0	661.2	8.80	0.7450	0.7663	63.3	63.3	506.7
0.1573	912.0	964.0	5.70	0.8450	0.8509	63.3	63.3	820.3
0.2091	1368.0	1314.5	3.90	0.9000	0.8992	63.3	63.3	1182.0
0.2607	1900.0	1720.7	9.40	0.9360	0.9298	63.3	63.3	1599.9
0.3119	2660.0	2189.4	17.70	0.9570	0.9504	63.3	63.3	2080.7
0.4136	4560.0	3359.0	26.30	0.9790	0.9750	63.3	63.3	3275.1
0.5141	7600.0	4919.6	35.30	0.9880	0.9879	63.3	63.3	4860.0
0.6134	10640.0	6997.5	34.20	0.9920	0.9947	63.3	63.3	6960.1
0.7117	13681.0	9751.1	28.70	0.9960	0.9980	63.3	63.3	9731.9
W(12)= 5.76				W(21)= .89				
BESE(Y)= 0.0161				a.d.(Y1)= 0.0094				
a.d.ABS(Pt)=1228.2				a.d.REL(Pt)= 0.175				
R^2/N=0.01040				a.d.(T)= 0.09				

FILE: CWU63

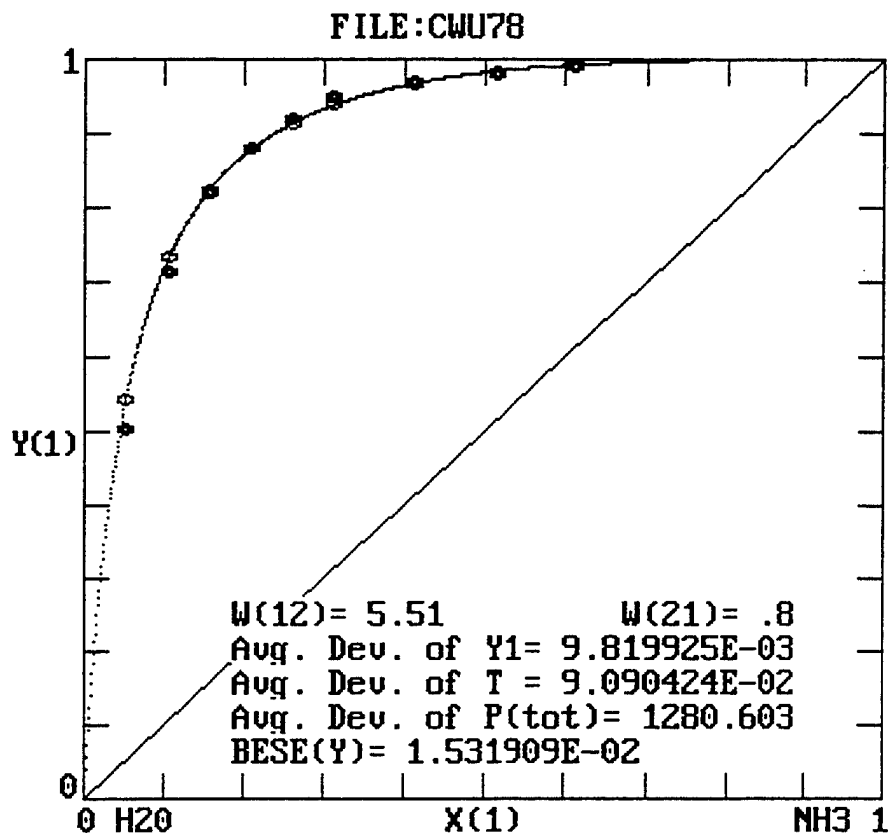
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0527	380.0	372.4	2.00	0.5430	0.5582	63.3	63.3	207.9
0.1052	608.0	617.4	1.50	0.7450	0.7507	63.3	63.3	463.5
0.1573	912.0	915.1	0.30	0.8450	0.8442	63.3	63.3	772.5
0.2091	1368.0	1273.3	6.90	0.9000	0.8974	63.3	63.3	1142.7
0.2607	1900.0	1701.3	10.50	0.9360	0.9305	63.3	63.3	1583.1
0.3119	2660.0	2206.6	17.00	0.9570	0.9522	63.3	63.3	2101.0
0.4136	4560.0	3494.7	23.40	0.9790	0.9771	63.3	63.3	3414.7
0.5141	7600.0	5228.0	31.20	0.9880	0.9893	63.3	63.3	5172.1
0.6134	10640.0	7506.4	29.50	0.9920	0.9954	63.3	63.3	7471.7
0.7117	13681.0	10427.1	23.80	0.9960	0.9983	63.3	63.3	10409.2

W(12)= 4.68342 W(21)= 1.253761
 BESE(Y)= 0.0059 a.d.(Y1)= 0.0044
 a.d.ABS(Pt)=1059.2 a.d.REL(Pt)= 0.146
 R^2/N=0.01183 a.d.(T)= 0.09

FILE: CWU63

X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0527	380.0	359.7	5.30	0.5430	0.5428	63.3	63.3	195.3
0.1052	608.0	593.2	2.40	0.7450	0.7408	63.3	63.3	439.5
0.1573	912.0	880.9	3.40	0.8450	0.8385	63.3	63.3	738.6
0.2091	1368.0	1230.8	10.00	0.9000	0.8943	63.3	63.3	1100.6
0.2607	1900.0	1652.4	13.00	0.9360	0.9289	63.3	63.3	1534.8
0.3119	2660.0	2153.4	19.00	0.9570	0.9514	63.3	63.3	2048.7
0.4136	4560.0	3440.3	24.60	0.9790	0.9770	63.3	63.3	3361.3
0.5141	7600.0	5181.7	31.80	0.9880	0.9894	63.3	63.3	5126.9
0.6134	10640.0	7476.2	29.70	0.9920	0.9955	63.3	63.3	7442.4
0.7117	13681.0	10416.8	23.90	0.9960	0.9983	63.3	63.3	10399.4

W(12)= 4.64309 W(21)= 1.33528
 BESE(Y)= 0.0045 a.d.(Y1)= 0.0039
 a.d.ABS(Pt)=1092.4 a.d.REL(Pt)= 0.163
 R^2/N=0.01323 a.d.(T)= 0.09



```

FILE: CWU78
Grid Search Wijs
X1(i)   Pt(i)   Pt(c)   %dPt   Y1(i)   Y1(c)   T(i)   T(c)   P1(c)
0.0527   684.0   691.5   1.10   0.5050   0.5447   78.3   78.4   376.6
0.1052  1064.0  1101.7   3.50   0.7130   0.7317   78.3   78.4   806.1
0.1573  1520.0  1569.5   3.30   0.8210   0.8245   78.3   78.4  1294.1
0.2091  2280.0  2104.1   7.70   0.8800   0.8791   78.3   78.4  1849.8
0.2607  3040.0  2716.5  10.60   0.9210   0.9145   78.3   78.4  2484.1
0.3119  3800.0  3415.7  10.10   0.9490   0.9386   78.3   78.4  3205.9
0.4136  6840.0  5136.0  24.90   0.9710   0.9682   78.3   78.4  4972.7
0.5141 11400.0  7395.2  35.10   0.9810   0.9841   78.3   78.4  7277.8
0.6134 15200.0 10361.8 31.80   0.9900   0.9928   78.3   78.4 10287.0

      W(12)= 5.51           W(21)= .8
      BESE(Y)= 0.0153      a.d.(Y1)= 0.0098
      a.d.ABS(Pt)=1280.6   a.d.REL(Pt)= 0.142
      R^2/N=0.00594       a.d.(T)= 0.09

```

FILE: CWU78

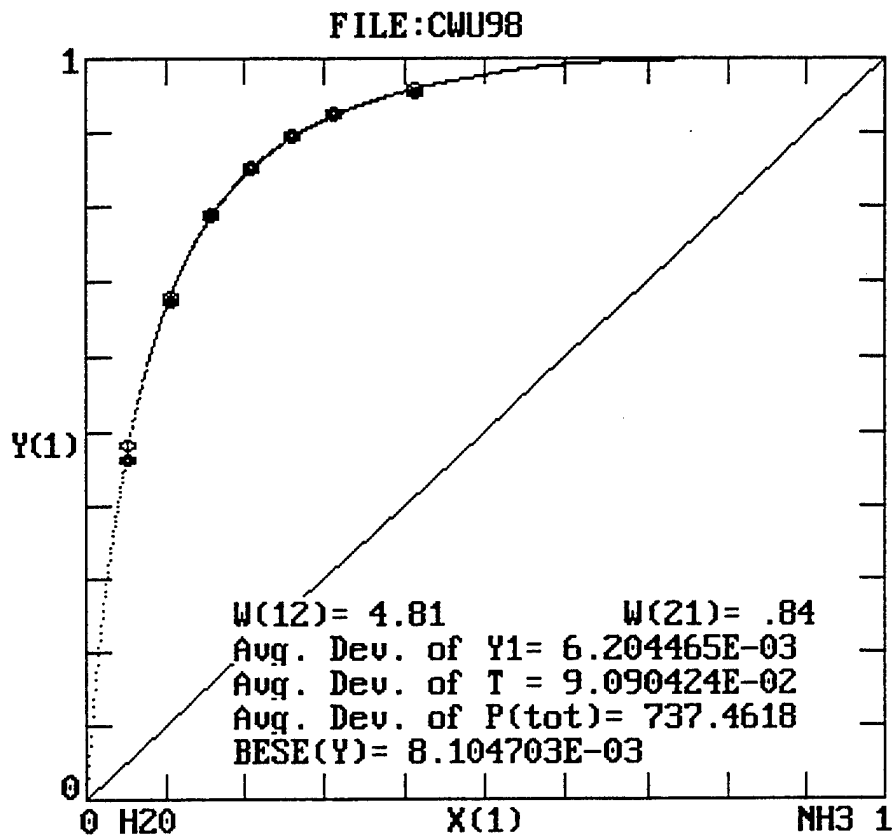
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0527	684.0	652.0	4.70	0.5050	0.5175	78.3	78.4	337.4
0.1052	1064.0	1038.2	2.40	0.7130	0.7162	78.3	78.4	743.6
0.1573	1520.0	1499.2	1.40	0.8210	0.8176	78.3	78.4	1225.8
0.2091	2280.0	2046.0	10.30	0.8800	0.8773	78.3	78.4	1795.0
0.2607	3040.0	2691.2	11.50	0.9210	0.9153	78.3	78.4	2463.3
0.3119	3800.0	3444.5	9.40	0.9490	0.9407	78.3	78.4	3240.4
0.4136	6840.0	5338.6	22.00	0.9710	0.9707	78.3	78.4	5182.3
0.5141	11400.0	7847.7	31.20	0.9810	0.9859	78.3	78.4	7737.3
0.6134	15200.0	11100.8	27.00	0.9900	0.9937	78.3	78.4	11031.2

W(12) = 4.422874 W(21) = 1.161104
 BESE(Y) = 0.0060 a.d.(Y1) = 0.0050
 a.d.ABS(Pt) = 1130.0 a.d.REL(Pt) = 0.133
 R²/N = 0.00733 a.d.(T) = 0.09

FILE: CWU78

X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0527	684.0	643.9	5.90	0.5050	0.5115	78.3	78.4	329.4
0.1052	1064.0	1022.8	3.90	0.7130	0.7120	78.3	78.4	728.3
0.1573	1520.0	1477.4	2.80	0.8210	0.8151	78.3	78.4	1204.3
0.2091	2280.0	2018.9	11.50	0.8800	0.8758	78.3	78.4	1768.2
0.2607	3040.0	2660.0	12.50	0.9210	0.9145	78.3	78.4	2432.6
0.3119	3800.0	3410.6	10.20	0.9490	0.9403	78.3	78.4	3207.0
0.4136	6840.0	5303.5	22.50	0.9710	0.9707	78.3	78.4	5148.0
0.5141	11400.0	7817.3	31.40	0.9810	0.9860	78.3	78.4	7707.7
0.6134	15200.0	11080.1	27.10	0.9900	0.9938	78.3	78.4	11011.1

W(12) = 4.406481 W(21) = 1.192588
 BESE(Y) = 0.0053 a.d.(Y1) = 0.0046
 a.d.ABS(Pt) = 1154.8 a.d.REL(Pt) = 0.142
 R²/N = 0.00774 a.d.(T) = 0.09



FILE: CWU98				Grid Search Wijs				
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0527	1216.0	1285.0	5.70	0.4650	0.4836	97.7	97.7	621.4
0.1052	1900.0	1953.4	2.80	0.6740	0.6810	97.7	97.7	1330.3
0.1573	2660.0	2715.8	2.10	0.7890	0.7862	97.7	97.7	2135.3
0.2091	3800.0	3586.6	5.60	0.8540	0.8505	97.7	97.7	3050.5
0.2607	5320.0	4582.6	13.90	0.8960	0.8931	97.7	97.7	4092.7
0.3119	6840.0	5716.8	16.40	0.9270	0.9226	97.7	97.7	5274.2
0.4136	11400.0	8490.0	25.50	0.9550	0.9593	97.7	97.7	8144.3

W(12)= 4.81 W(21)= .84

BESE(Y)= 0.0081 a.d.(Y1)= 0.0062

a.d.ABS(Pt)= 737.5 a.d.REL(Pt)= 0.103

R^2/N=0.00098 a.d.(T)= 0.09

```

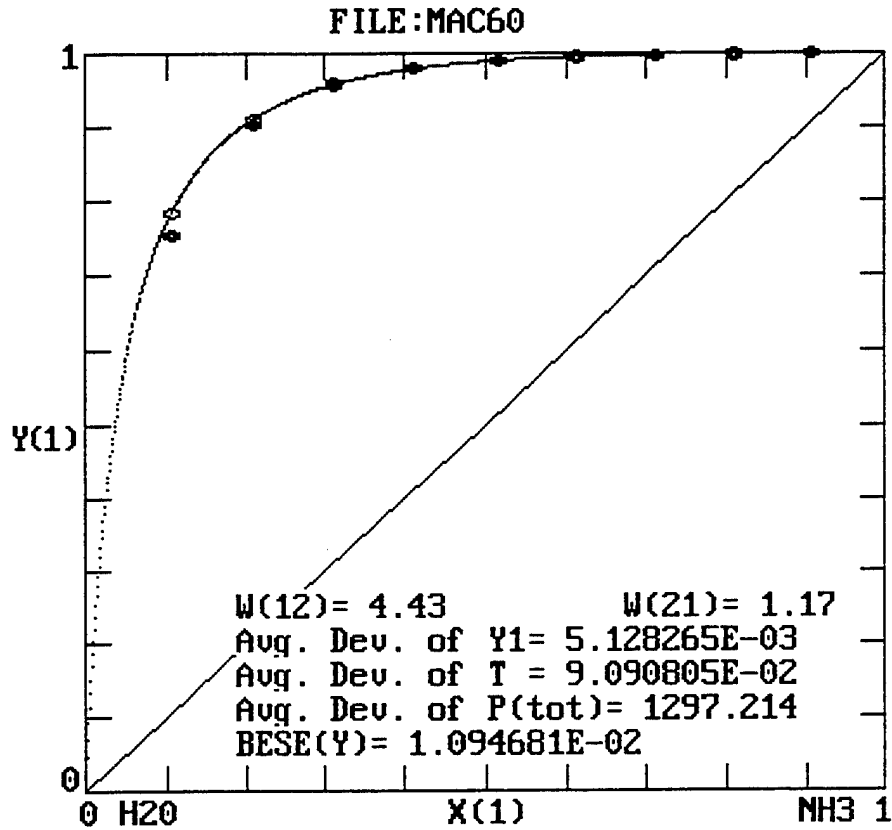
FILE: CWU98
f(S) Curved Fit Wijs
X1(i) Pt(i) Pt(c) %dPt Y1(i) Y1(c) T(i) T(c) P1(c)
0.0527 1216.0 1239.2 1.90 0.4650 0.4648 97.7 97.7 576.0
0.1052 1900.0 1882.1 0.90 0.6740 0.6698 97.7 97.7 1260.6
0.1573 2660.0 2641.9 0.70 0.7890 0.7815 97.7 97.7 2064.5
0.2091 3800.0 3534.3 7.00 0.8540 0.8498 97.7 97.7 3003.4
0.2607 5320.0 4577.9 13.90 0.8960 0.8945 97.7 97.7 4095.1
0.3119 6840.0 5786.1 15.40 0.9270 0.9250 97.7 97.7 5352.4
0.4136 11400.0 8784.6 22.90 0.9550 0.9619 97.7 97.7 8450.1
W(12)= 4.004061 W(21)= 1.123217
BESE(Y)= 0.0046 a.d.(Y1)= 0.0038
a.d.ABS(Pt)= 676.6 a.d.REL(Pt)= 0.090
R^2/N=0.00154 a.d.(T)= 0.09

```

```

FILE: CWU98
f(S) Linear Fit Wijs
X1(i) Pt(i) Pt(c) %dPt Y1(i) Y1(c) T(i) T(c) P1(c)
0.0527 1216.0 1272.0 4.60 0.4650 0.4785 97.7 97.7 608.7
0.1052 1900.0 1944.7 2.40 0.6740 0.6801 97.7 97.7 1322.7
0.1573 2660.0 2730.3 2.60 0.7890 0.7882 97.7 97.7 2152.0
0.2091 3800.0 3644.5 4.10 0.8540 0.8538 97.7 97.7 3111.8
0.2607 5320.0 4704.9 11.60 0.8960 0.8969 97.7 97.7 4219.7
0.3119 6840.0 5924.7 13.40 0.9270 0.9263 97.7 97.7 5488.0
0.4136 11400.0 8929.5 21.70 0.9550 0.9621 97.7 97.7 8591.1
W(12)= 4.039966 W(21)= 1.051391
BESE(Y)= 0.0062 a.d.(Y1)= 0.0042
a.d.ABS(Pt)= 618.2 a.d.REL(Pt)= 0.086
R^2/N=0.00149 a.d.(T)= 0.09

```



FILE:MAC60				Grid Search Wijs				
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.1052	543.0	614.2	13.10	0.7517	0.7837	60.0	60.0	481.4
0.2092	1225.6	1278.0	4.30	0.9050	0.9115	60.0	60.0	1164.9
0.3120	2347.9	2197.7	6.40	0.9597	0.9582	60.0	60.0	2105.7
0.4136	4240.6	3440.5	18.90	0.9801	0.9796	60.0	60.0	3370.2
0.5141	6981.5	5086.7	27.10	0.9906	0.9902	60.0	60.0	5037.0
0.6135	10033.0	7221.3	28.00	0.9947	0.9957	60.0	60.0	7190.0
0.7117	12825.0	9912.9	22.70	0.9966	0.9983	60.0	60.0	9896.3
0.8089	15308.0	13167.3	14.00	0.9979	0.9995	60.0	60.0	13160.6
0.9050	17583.0	16741.3	4.80	0.9990	0.9999	60.0	60.0	16739.8
W(12)= 4.43				W(21)= 1.17				
BESE(Y)= 0.0109				a.d.(Y1)= 0.0051				
a.d.ABS(Pt)=1297.2				a.d.REL(Pt)= 0.155				
R^2/N=0.02120				a.d.(T)= 0.09				

FILE:MAC60

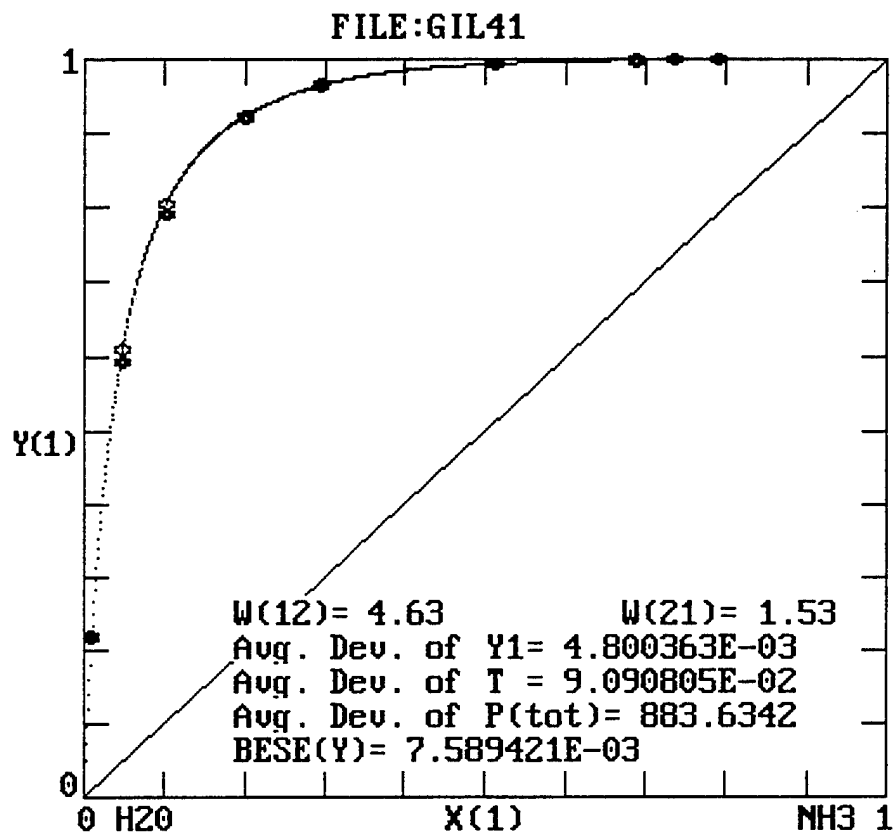
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.1052	543.0	547.7	0.90	0.7517	0.7579	60.0	60.0	415.1
0.2092	1225.6	1142.7	6.80	0.9050	0.9016	60.0	60.0	1030.3
0.3120	2347.9	1994.2	15.10	0.9597	0.9545	60.0	60.0	1903.5
0.4136	4240.6	3173.9	25.20	0.9801	0.9784	60.0	60.0	3105.3
0.5141	6981.5	4768.3	31.70	0.9906	0.9900	60.0	60.0	4720.5
0.6135	10033.0	6872.7	31.50	0.9947	0.9957	60.0	60.0	6843.2
0.7117	12825.0	9572.2	25.40	0.9966	0.9984	60.0	60.0	9557.0
0.8089	15308.0	12895.1	15.80	0.9979	0.9995	60.0	60.0	12889.3
0.9050	17583.0	16612.8	5.50	0.9990	0.9999	60.0	60.0	16611.6

W(12)= 4.733871 W(21)= 1.281342
 BESE(Y)= 0.0031 a.d.(Y1)= 0.0025
 a.d.ABS(Pt)=1501.9 a.d.REL(Pt)= 0.175
 R^2/N=0.02356 a.d.(T)= 0.09

FILE:MAC60

X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.1052	543.0	524.4	3.40	0.7517	0.7474	60.0	60.0	391.9
0.2092	1225.6	1101.6	10.10	0.9050	0.8984	60.0	60.0	989.6
0.3120	2347.9	1942.9	17.20	0.9597	0.9538	60.0	60.0	1853.1
0.4136	4240.6	3121.5	26.40	0.9801	0.9783	60.0	60.0	3053.9
0.5141	6981.5	4724.0	32.30	0.9906	0.9901	60.0	60.0	4677.2
0.6135	10033.0	6844.2	31.80	0.9947	0.9958	60.0	60.0	6815.5
0.7117	12825.0	9563.1	25.40	0.9966	0.9985	60.0	60.0	9548.4
0.8089	15308.0	12901.6	15.70	0.9979	0.9996	60.0	60.0	12896.0
0.9050	17583.0	16621.5	5.50	0.9990	0.9999	60.0	60.0	16620.3

W(12)= 4.69074 W(21)= 1.369721
 BESE(Y)= 0.0035 a.d.(Y1)= 0.0027
 a.d.ABS(Pt)=1527.0 a.d.REL(Pt)= 0.187
 R^2/N=0.02528 a.d.(T)= 0.09



FILE:GIL41					Grid Search Wijs			
$X_1(i)$	$Pt(i)$	$Pt(c)$	%dPt	$Y_1(i)$	$Y_1(c)$	$T(i)$	$T(c)$	$P_1(c)$
0.0102	69.8	70.6	1.10	0.2154	0.2201	40.0	40.0	15.5
0.0483	129.5	134.8	4.10	0.5919	0.6085	40.0	40.0	82.0
0.1028	237.8	251.9	5.90	0.7907	0.8050	40.0	40.0	202.8
0.1985	542.8	545.2	0.40	0.9202	0.9230	40.0	40.0	503.2
0.2930	1153.6	972.6	15.70	0.9667	0.9647	40.0	40.0	938.3
0.5118	4085.6	2714.1	33.60	0.9945	0.9938	40.0	40.0	2697.3
0.6892	7446.6	5235.3	29.70	0.9982	0.9988	40.0	40.0	5229.1
0.7350	8273.2	6088.2	26.40	0.9986	0.9993	40.0	40.0	6084.0
0.7900	9203.3	7222.0	21.50	0.9990	0.9997	40.0	40.0	7219.6
$W(12) = 4.63$					$W(21) = 1.53$			
$BESE(Y) = 0.0076$					$a.d.(Y_1) = 0.0048$			
$a.d.ABS(Pt) = 883.6$					$a.d.REL(Pt) = 0.154$			
$R^2/N = 0.01274$					$a.d.(T) = 0.09$			

FILE:GIL41

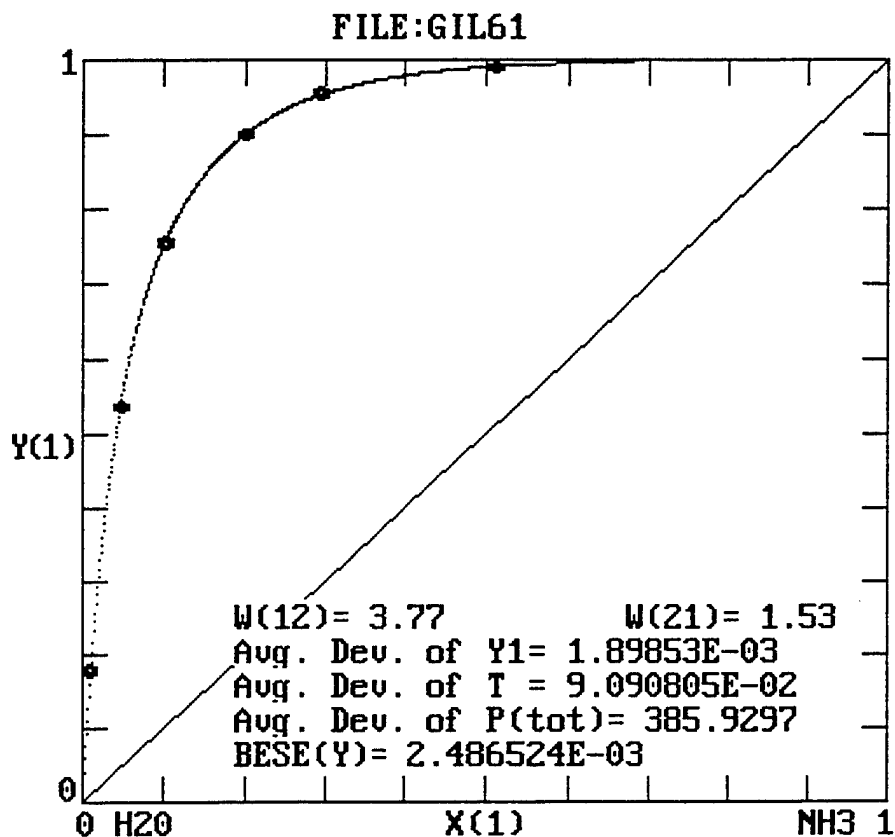
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	Pl(c)
0.0102	69.8	69.5	0.40	0.2154	0.2085	40.0	40.0	14.5
0.0483	129.5	129.3	0.20	0.5919	0.5920	40.0	40.0	76.5
0.1028	237.8	238.5	0.30	0.7907	0.7941	40.0	40.0	189.4
0.1985	542.8	512.9	5.50	0.9202	0.9182	40.0	40.0	471.0
0.2930	1153.6	915.3	20.70	0.9667	0.9626	40.0	40.0	881.0
0.5118	4085.6	2578.8	36.90	0.9945	0.9935	40.0	40.0	2562.2
0.6892	7446.6	5049.3	32.20	0.9982	0.9988	40.0	40.0	5043.4
0.7350	8273.2	5901.4	28.70	0.9986	0.9993	40.0	40.0	5897.4
0.7900	9203.3	7047.6	23.40	0.9990	0.9997	40.0	40.0	7045.3

W(12)= 5.006264 W(21)= 1.521318
 BESE(Y)= 0.0030 a.d.(Y1)= 0.0022
 a.d.ABS(Pt)= 966.8 a.d.REL(Pt)= 0.165
 R^2/N=0.01362 a.d.(T)= 0.09

FILE:GIL41

X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	Pl(c)
0.0102	69.8	68.4	1.90	0.2154	0.1957	40.0	40.0	13.4
0.0483	129.5	124.1	4.10	0.5919	0.5752	40.0	40.0	71.4
0.1028	237.8	228.0	4.10	0.7907	0.7848	40.0	40.0	178.9
0.1985	542.8	494.5	8.90	0.9202	0.9155	40.0	40.0	452.8
0.2930	1153.6	892.1	22.70	0.9667	0.9619	40.0	40.0	858.1
0.5118	4085.6	2559.4	37.40	0.9945	0.9936	40.0	40.0	2543.0
0.6892	7446.6	5045.5	32.20	0.9982	0.9989	40.0	40.0	5039.8
0.7350	8273.2	5902.0	28.70	0.9986	0.9993	40.0	40.0	5898.1
0.7900	9203.3	7052.2	23.40	0.9990	0.9997	40.0	40.0	7050.0

W(12)= 4.966953 W(21)= 1.611134
 BESE(Y)= 0.0091 a.d.(Y1)= 0.0061
 a.d.ABS(Pt)= 975.1 a.d.REL(Pt)= 0.182
 R^2/N=0.01521 a.d.(T)= 0.09



FILE:GIL61				Grid Search Wijs				
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0101	177.6	180.5	1.60	0.1807	0.1767	60.0	60.0	31.9
0.0475	304.1	308.7	1.50	0.5375	0.5383	60.0	60.0	166.2
0.1022	537.7	546.1	1.60	0.7527	0.7568	60.0	60.0	413.3
0.1994	1178.9	1141.5	3.20	0.9006	0.9006	60.0	60.0	1028.1
0.2945	2290.7	1988.4	13.20	0.9551	0.9533	60.0	60.0	1895.5
0.5110	7188.6	5228.7	27.30	0.9904	0.9910	60.0	60.0	5181.5

W(12)= 3.77	W(21)= 1.53
BESE(Y)= 0.0025	a.d.(Y1)= 0.0019
a.d.ABS(Pt)= 385.9	a.d.REL(Pt)= 0.081
R^2/N=0.00030	a.d.(T)= 0.09

FILE:GIL61

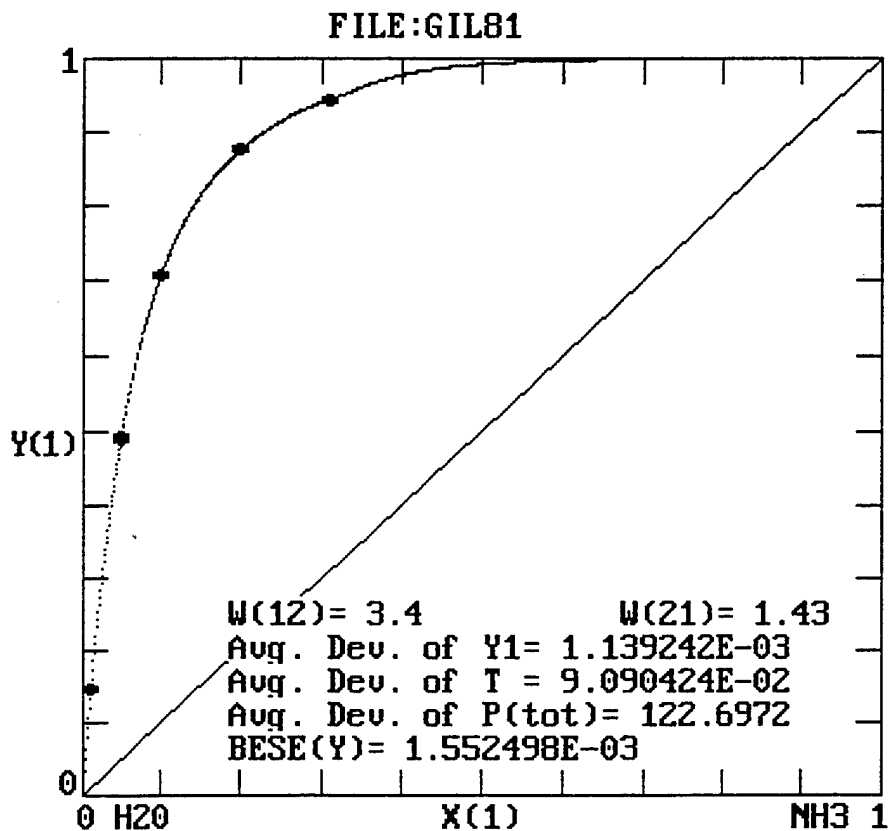
				f(S) Curved Fit Wijs				
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0101	177.6	181.0	1.90	0.1807	0.1789	60.0	60.0	32.4
0.0475	304.1	308.0	1.30	0.5375	0.5368	60.0	60.0	165.3
0.1022	537.7	533.8	0.70	0.7527	0.7506	60.0	60.0	400.7
0.1994	1178.9	1076.3	8.70	0.9006	0.8937	60.0	60.0	961.9
0.2945	2290.7	1827.4	20.20	0.9551	0.9483	60.0	60.0	1733.0
0.5110	7188.6	4711.7	34.50	0.9904	0.9897	60.0	60.0	4663.3

W(12)= 4.733871 W(21)= 1.281342
 BESE(Y)= 0.0041 a.d.(Y1)= 0.0032
 a.d.ABS(Pt)= 509.0 a.d.REL(Pt)= 0.112
 R^2/N=0.00222 a.d.(T)= 0.09

FILE:GIL61

				f(S) Linear Fit Wijs				
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0101	177.6	178.6	0.50	0.1807	0.1679	60.0	60.0	30.0
0.0475	304.1	296.9	2.40	0.5375	0.5198	60.0	60.0	154.3
0.1022	537.7	511.1	5.00	0.7527	0.7398	60.0	60.0	378.1
0.1994	1178.9	1036.6	12.10	0.9006	0.8901	60.0	60.0	922.6
0.2945	2290.7	1777.3	22.40	0.9551	0.9473	60.0	60.0	1683.6
0.5110	7188.6	4667.0	35.10	0.9904	0.9899	60.0	60.0	4619.6

W(12)= 4.69074 W(21)= 1.369721
 BESE(Y)= 0.0117 a.d.(Y1)= 0.0104
 a.d.ABS(Pt)= 535.4 a.d.REL(Pt)= 0.129
 R^2/N=0.00374 a.d.(T)= 0.09



```

FILE:GIL81
Grid Search Wijs
X1(i)   Pt(i)   Pt(c)   %dPt   Y1(i)   Y1(c)   T(i)   T(c)   P1(c)
0.0098  413.6    413.2   0.10   0.1483  0.1453  80.0   80.0   60.0
0.0485  670.7    664.4   0.90   0.4919  0.4907  80.0   80.0   326.0
0.1011  1107.4   1085.1   2.00   0.7071  0.7083  80.0   80.0   768.6
0.2006  2329.0   2173.5   6.70   0.8754  0.8755  80.0   80.0  1903.0
0.3089  4318.1   3889.1   9.90   0.9445  0.9443  80.0   80.0  3672.6
0.5107 11633.0   9005.7  22.60   0.9836  0.9870  80.0   80.0  8888.5

      W(12)= 3.4          W(21)= 1.43
      BESE(Y)= 0.0020    a.d.(Y1)= 0.0015
      a.d.ABS(Pt)= 540.1  a.d.REL(Pt)= 0.070
      R^2/N=0.00209      a.d.(T)= 0.09
  
```

FILE:GIL81

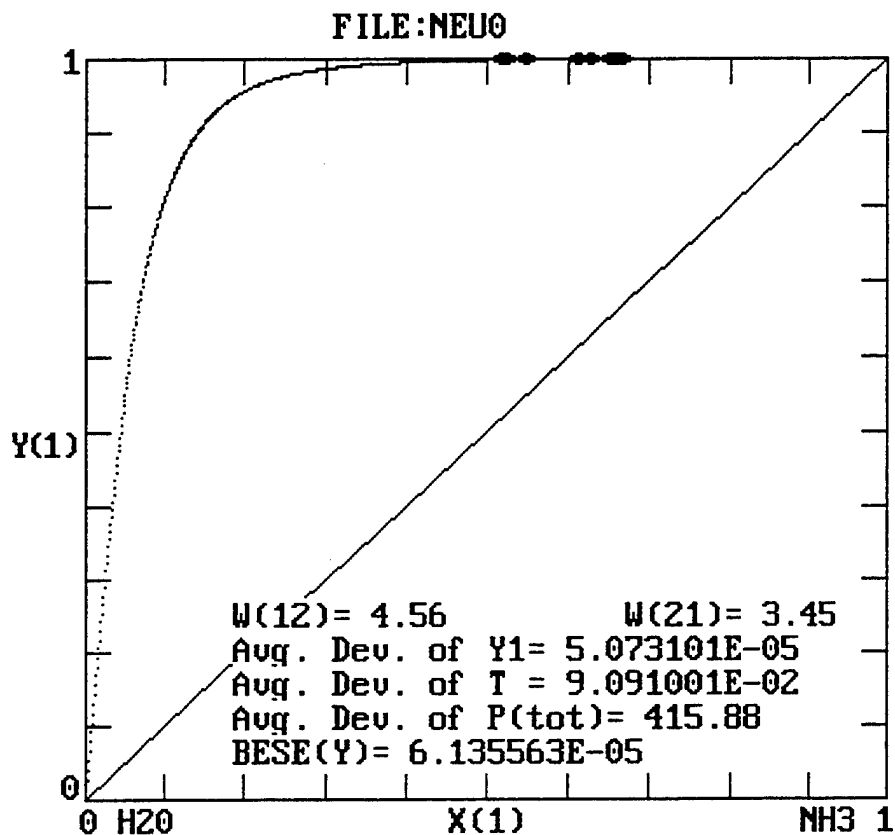
				f(S) Curved Fit Wijs				
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0098	413.6	414.0	0.10	0.1483	0.1471	80.0	80.0	60.9
0.0485	670.7	662.6	1.20	0.4919	0.4890	80.0	80.0	324.0
0.1011	1107.4	1062.4	4.10	0.7071	0.7013	80.0	80.0	745.1
0.2006	2329.0	2051.0	11.90	0.8754	0.8669	80.0	80.0	1777.9
0.3089	4318.1	3562.5	17.50	0.9445	0.9381	80.0	80.0	3342.1
0.5107	11633.0	8097.1	30.40	0.9836	0.9852	80.0	80.0	7976.8

W(12) = 4.390568 W(21) = 1.154137
 BESE(Y) = 0.0051 a.d.(Y1) = 0.0044
 a.d.ABS(Pt) = 770.5 a.d.REL(Pt) = 0.109
 R²/N = 0.00175 a.d.(T) = 0.09

FILE:GIL81

				f(S) Linear Fit Wijs				
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0098	413.6	412.8	0.20	0.1483	0.1445	80.0	80.0	59.6
0.0485	670.7	656.6	2.10	0.4919	0.4843	80.0	80.0	318.0
0.1011	1107.4	1050.4	5.10	0.7071	0.6980	80.0	80.0	733.1
0.2006	2329.0	2029.7	12.90	0.8754	0.8656	80.0	80.0	1756.9
0.3089	4318.1	3535.1	18.10	0.9445	0.9378	80.0	80.0	3315.3
0.5107	11633.0	8072.2	30.60	0.9836	0.9852	80.0	80.0	7952.7

W(12) = 4.377883 W(21) = 1.178314
 BESE(Y) = 0.0070 a.d.(Y1) = 0.0064
 a.d.ABS(Pt) = 785.8 a.d.REL(Pt) = 0.115
 R²/N = 0.00209 a.d.(T) = 0.09



FILE:NEU0				Grid Search Wijs					
$X1(i)$	$Pt(i)$	$Pt(c)$	$\%dPt$	$Y1(i)$	$Y1(c)$	$T(i)$	$T(c)$	$P1(c)$	
0.5168	916.3	656.9	28.30	0.9986	0.9986	0.0	0.0	656.0	
0.5238	945.2	680.0	28.10	0.9987	0.9987	0.0	0.0	679.1	
0.5474	1141.0	760.9	33.30	0.9991	0.9990	0.0	0.0	760.1	
0.6121	1409.8	1014.6	28.00	0.9995	0.9995	0.0	0.0	1014.1	
0.6277	1499.7	1082.8	27.80	0.9995	0.9996	0.0	0.0	1082.4	
0.6508	1684.6	1189.1	29.40	0.9996	0.9997	0.0	0.0	1188.8	
0.6571	1732.5	1219.5	29.60	0.9997	0.9997	0.0	0.0	1219.1	
0.6662	1865.5	1263.7	32.30	0.9998	0.9997	0.0	0.0	1263.4	
$W(12) = 4.56$				$W(21) = 3.45$					
$BESE(Y) = 0.0001$				a.d.(Y1) = 0.0001					
a.d.ABS(Pt) = 415.9				a.d.REL(Pt) = 0.296					
$R^2/N = 0.00290$				a.d.(T) = 0.09					

```

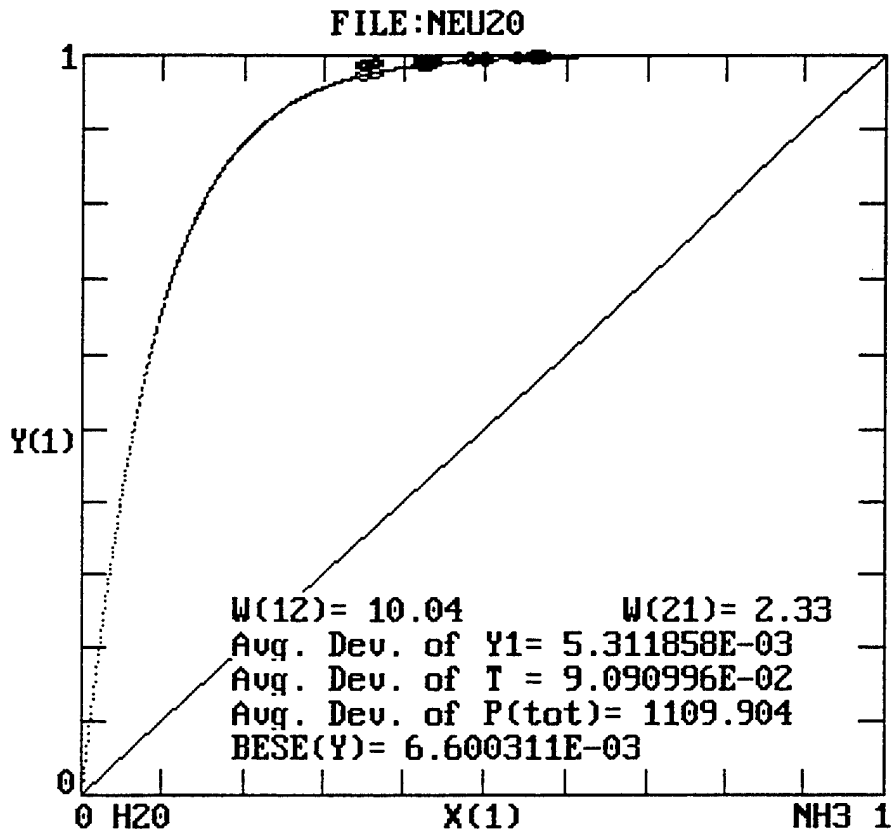
FILE:NEUO
      f(S) Curved Fit Wijs
X1(i)  Pt(i)  Pt(c)  %dPt  Y1(i)  Y1(c)  T(i)  T(c)  P1(c)
0.5168  916.3  616.5  32.70  0.9986  0.9983  0.0  0.0  615.5
0.5238  945.2  637.6  32.50  0.9987  0.9984  0.0  0.0  636.6
0.5474  1141.0  711.6  37.60  0.9991  0.9987  0.0  0.0  710.7
0.6121  1409.8  946.3  32.90  0.9995  0.9994  0.0  0.0  945.7
0.6277  1499.7  1010.3  32.60  0.9995  0.9995  0.0  0.0  1009.7
0.6508  1684.6  1110.6  34.10  0.9996  0.9996  0.0  0.0  1110.1
0.6571  1732.5  1139.4  34.20  0.9997  0.9996  0.0  0.0  1138.9
0.6662  1865.5  1181.5  36.70  0.9998  0.9997  0.0  0.0  1181.1
      W(12)= 5.396007      W(21)= 2.568104
      BESE(Y)= 0.0002      a.d.(Y1)= 0.0002
      a.d.ABS(Pt)= 480.1    a.d.REL(Pt)= 0.342
      R^2/N=0.01042        a.d.(T)= 0.09

```

```

FILE:NEUO
      f(S) Linear Fit Wijs
X1(i)  Pt(i)  Pt(c)  %dPt  Y1(i)  Y1(c)  T(i)  T(c)  P1(c)
0.5168  916.3  624.0  31.90  0.9986  0.9982  0.0  0.0  622.9
0.5238  945.2  644.8  31.80  0.9987  0.9983  0.0  0.0  643.7
0.5474  1141.0  717.7  37.10  0.9991  0.9987  0.0  0.0  716.7
0.6121  1409.8  949.2  32.70  0.9995  0.9993  0.0  0.0  948.5
0.6277  1499.7  1012.2  32.50  0.9995  0.9994  0.0  0.0  1011.7
0.6508  1684.6  1111.3  34.00  0.9996  0.9996  0.0  0.0  1110.8
0.6571  1732.5  1139.7  34.20  0.9997  0.9996  0.0  0.0  1139.2
0.6662  1865.5  1181.4  36.70  0.9998  0.9996  0.0  0.0  1180.9
      W(12)= 5.48988      W(21)= 2.261285
      BESE(Y)= 0.0003      a.d.(Y1)= 0.0002
      a.d.ABS(Pt)= 476.8    a.d.REL(Pt)= 0.339
      R^2/N=0.01572        a.d.(T)= 0.09

```



FILE:NEU20					Grid Search Wijs				
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)	
0.3489	737.4	305.0	58.60	0.9873	0.9731	20.0	20.0	296.8	
0.3651	807.3	337.1	58.20	0.9885	0.9770	20.0	20.0	329.3	
0.4208	1148.6	467.5	59.30	0.9925	0.9867	20.0	20.0	461.2	
0.4239	1173.6	475.9	59.50	0.9927	0.9871	20.0	20.0	469.7	
0.4309	1234.4	494.8	59.90	0.9932	0.9879	20.0	20.0	488.8	
0.4373	1289.3	512.9	60.20	0.9936	0.9887	20.0	20.0	507.1	
0.4818	1684.1	652.7	61.20	0.9958	0.9928	20.0	20.0	648.0	
0.4994	1944.3	716.1	63.20	0.9967	0.9940	20.0	20.0	711.8	
0.5394	2660.1	878.6	67.00	0.9981	0.9961	20.0	20.0	875.2	
0.5597	3080.5	972.2	68.40	0.9986	0.9969	20.0	20.0	969.2	
0.5692	3281.2	1018.9	68.90	0.9987	0.9972	20.0	20.0	1016.1	
W(12)= 10.04				W(21)= 2.33					
BESE(Y)= 0.0066				a.d.(Y1)= 0.0053					
a.d.ABS(Pt)=1109.9				a.d.REL(Pt)= 0.622					
R^2/N=0.12376				a.d.(T)= 0.09					

FILE:NEU20

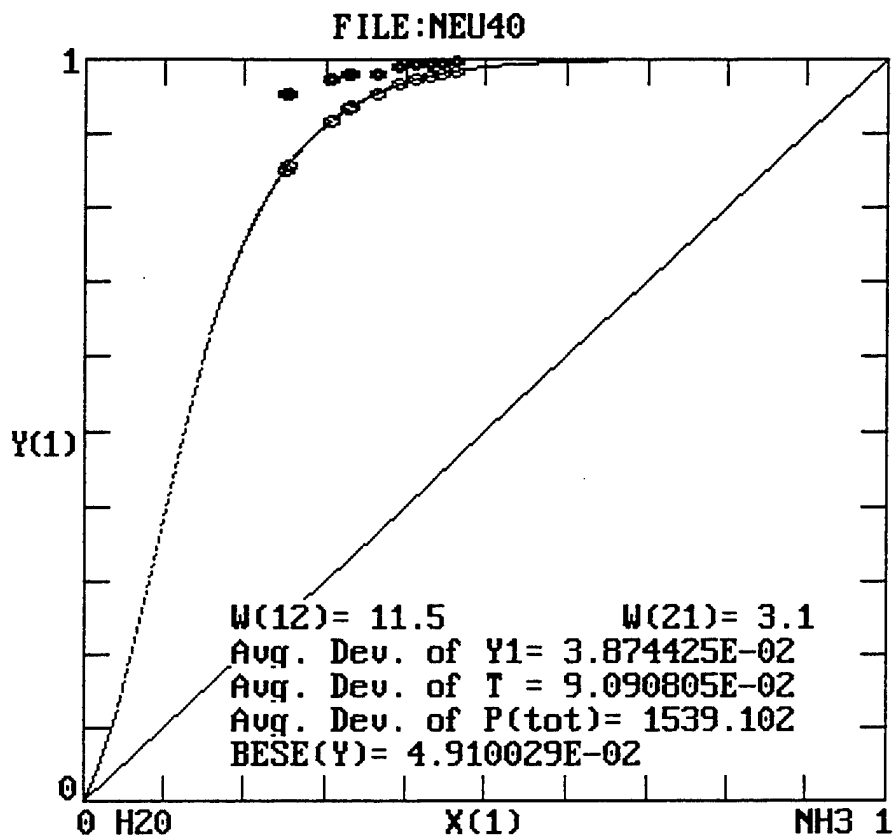
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.3489	737.4	580.5	21.30	0.9873	0.9847	20.0	20.0	571.6
0.3651	807.3	634.9	21.40	0.9885	0.9867	20.0	20.0	626.4
0.4208	1148.6	849.1	26.10	0.9925	0.9918	20.0	20.0	842.1
0.4239	1173.6	862.6	26.50	0.9927	0.9920	20.0	20.0	855.7
0.4309	1234.4	892.8	27.70	0.9932	0.9925	20.0	20.0	886.1
0.4373	1289.3	921.5	28.50	0.9936	0.9929	20.0	20.0	915.0
0.4818	1684.1	1138.1	32.40	0.9958	0.9952	20.0	20.0	1132.6
0.4994	1944.3	1233.6	36.60	0.9967	0.9959	20.0	20.0	1228.5
0.5394	2660.1	1471.4	44.70	0.9981	0.9972	20.0	20.0	1467.2
0.5597	3080.5	1604.2	47.90	0.9986	0.9977	20.0	20.0	1600.4
0.5692	3281.2	1669.5	49.10	0.9987	0.9979	20.0	20.0	1665.9

W(12)= 5.222683 W(21)= 1.92062
 BESE(Y)= 0.0012 a.d.(Y1)= 0.0010
 a.d.ABS(Pt)= 653.0 a.d.REL(Pt)= 0.329
 R^2/N=0.01639 a.d.(T)= 0.09

FILE:NEU20

X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.3489	737.4	582.0	21.10	0.9873	0.9847	20.0	20.0	573.1
0.3651	807.3	636.4	21.20	0.9885	0.9867	20.0	20.0	628.0
0.4208	1148.6	850.6	25.90	0.9925	0.9918	20.0	20.0	843.6
0.4239	1173.6	864.0	26.40	0.9927	0.9920	20.0	20.0	857.1
0.4309	1234.4	894.2	27.60	0.9932	0.9925	20.0	20.0	887.5
0.4373	1289.3	923.0	28.40	0.9936	0.9929	20.0	20.0	916.4
0.4818	1684.1	1139.4	32.30	0.9958	0.9952	20.0	20.0	1133.9
0.4994	1944.3	1234.8	36.50	0.9967	0.9959	20.0	20.0	1229.8
0.5394	2660.1	1472.4	44.60	0.9981	0.9972	20.0	20.0	1468.2
0.5597	3080.5	1605.1	47.90	0.9986	0.9977	20.0	20.0	1601.4
0.5692	3281.2	1670.4	49.10	0.9987	0.9979	20.0	20.0	1666.8

W(12)= 5.227474 W(21)= 1.906681
 BESE(Y)= 0.0012 a.d.(Y1)= 0.0010
 a.d.ABS(Pt)= 651.7 a.d.REL(Pt)= 0.328
 R^2/N=0.01657 a.d.(T)= 0.09



FILE:NEU40					Grid Search Wijs				
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)	
0.2501	788.5	221.6	71.90	0.9537	0.8516	40.0	40.0	188.7	
0.2537	810.2	227.5	71.90	0.9533	0.8570	40.0	40.0	194.9	
0.3069	1166.1	333.2	71.40	0.9725	0.9181	40.0	40.0	305.9	
0.3269	1364.5	382.4	72.00	0.9784	0.9335	40.0	40.0	357.0	
0.3313	1405.0	394.2	71.90	0.9794	0.9366	40.0	40.0	369.2	
0.3633	1820.9	487.4	73.20	0.9814	0.9547	40.0	40.0	465.3	
0.3903	2200.5	579.4	73.70	0.9907	0.9659	40.0	40.0	559.7	
0.4113	2479.0	660.6	73.40	0.9923	0.9727	40.0	40.0	642.5	
0.4293	2850.4	736.5	74.20	0.9935	0.9775	40.0	40.0	719.9	
0.4462	3244.0	814.8	74.90	0.9945	0.9812	40.0	40.0	799.5	
0.4456	3232.0	811.6	74.90	0.9944	0.9811	40.0	40.0	796.3	
0.4634	3657.6	900.3	75.40	0.9952	0.9844	40.0	40.0	886.3	
W(12)= 11.5				W(21)= 3.1					
BESE(Y)= 0.0491				a.d. (Y1)= 0.0387					
a.d.ABS(Pt)=1539.1				a.d.REL(Pt)= 0.732					
R^2/N=0.52150				a.d. (T)= 0.09					

FILE:NEU40

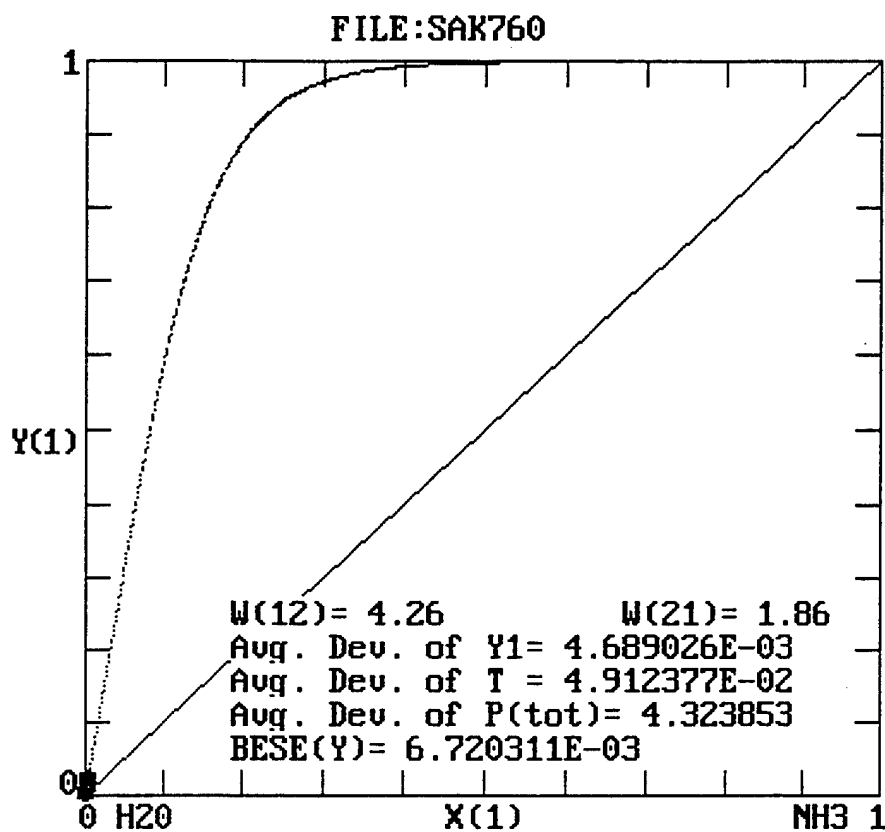
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.2501	788.5	714.2	9.40	0.9537	0.9471	40.0	40.0	676.4
0.2537	810.2	729.6	10.00	0.9533	0.9486	40.0	40.0	692.1
0.3069	1166.1	987.7	15.30	0.9725	0.9665	40.0	40.0	954.6
0.3269	1364.5	1098.4	19.50	0.9784	0.9714	40.0	40.0	1067.0
0.3313	1405.0	1124.4	20.00	0.9794	0.9724	40.0	40.0	1093.3
0.3633	1820.9	1321.8	27.40	0.9814	0.9785	40.0	40.0	1293.4
0.3903	2200.5	1506.9	31.50	0.9907	0.9826	40.0	40.0	1480.7
0.4113	2479.0	1663.6	32.90	0.9923	0.9853	40.0	40.0	1639.1
0.4293	2850.4	1805.8	36.60	0.9935	0.9873	40.0	40.0	1782.8
0.4462	3244.0	1948.7	39.90	0.9945	0.9889	40.0	40.0	1927.0
0.4456	3232.0	1942.9	39.90	0.9944	0.9888	40.0	40.0	1921.2
0.4634	3657.6	2100.7	42.60	0.9952	0.9903	40.0	40.0	2080.4

W(12) = 5.006264 W(21) = 1.521318
 BESE(Y) = 0.0061 a.d.(Y1) = 0.0060
 a.d.ABS(Pt) = 672.8 a.d.REL(Pt) = 0.271
 R^2/N = 0.08149 a.d.(T) = 0.09

FILE:NEU40

X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.2501	788.5	692.7	12.10	0.9537	0.9458	40.0	40.0	655.2
0.2537	810.2	708.0	12.60	0.9533	0.9474	40.0	40.0	670.7
0.3069	1166.1	964.1	17.30	0.9725	0.9660	40.0	40.0	931.3
0.3269	1364.5	1074.4	21.30	0.9784	0.9711	40.0	40.0	1043.3
0.3313	1405.0	1100.3	21.70	0.9794	0.9721	40.0	40.0	1069.6
0.3633	1820.9	1297.5	28.70	0.9814	0.9784	40.0	40.0	1269.5
0.3903	2200.5	1482.7	32.60	0.9907	0.9826	40.0	40.0	1456.9
0.4113	2479.0	1639.8	33.90	0.9923	0.9853	40.0	40.0	1615.7
0.4293	2850.4	1782.5	37.50	0.9935	0.9873	40.0	40.0	1759.8
0.4462	3244.0	1925.9	40.60	0.9945	0.9889	40.0	40.0	1904.6
0.4456	3232.0	1920.1	40.60	0.9944	0.9889	40.0	40.0	1898.7
0.4634	3657.6	2078.6	43.20	0.9952	0.9904	40.0	40.0	2058.6

W(12) = 4.966953 W(21) = 1.611134
 BESE(Y) = 0.0064 a.d.(Y1) = 0.0063
 a.d.ABS(Pt) = 696.0 a.d.REL(Pt) = 0.285
 R^2/N = 0.08214 a.d.(T) = 0.09



FILE:SAK760				Grid Search Wjjs				
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0000	760.0	759.8	0.00	0.0001	0.0001	100.0	99.9	0.0
0.0000	760.0	759.9	0.00	0.0003	0.0002	100.0	99.9	0.1
0.0001	760.0	757.2	0.40	0.0007	0.0004	99.9	99.8	0.3
0.0001	760.0	760.3	0.00	0.0017	0.0007	100.0	99.9	0.6
0.0002	760.0	754.5	0.70	0.0025	0.0011	99.7	99.7	0.9
0.0002	760.0	754.5	0.70	0.0027	0.0012	99.7	99.7	0.9
0.0005	760.0	758.9	0.10	0.0072	0.0033	99.8	99.8	2.5
0.0007	760.0	756.9	0.40	0.0106	0.0046	99.7	99.7	3.5
0.0008	760.0	757.3	0.40	0.0117	0.0052	99.7	99.7	4.0
0.0012	760.0	752.9	0.90	0.0163	0.0076	99.5	99.5	5.7
0.0016	760.0	748.9	1.50	0.0218	0.0102	99.3	99.3	7.6
0.0020	760.0	747.5	1.60	0.0276	0.0123	99.2	99.2	9.2
W(12)= 4.26				W(21)= 1.86				
BESE(Y)= 0.0067				a.d.(Y1)= 0.0047				
a.d.ABS(Pt)= 4.3				a.d.REL(Pt)= 0.006				
R^2/N=0.00046				a.d.(T)= 0.05				

FILE:SAK760

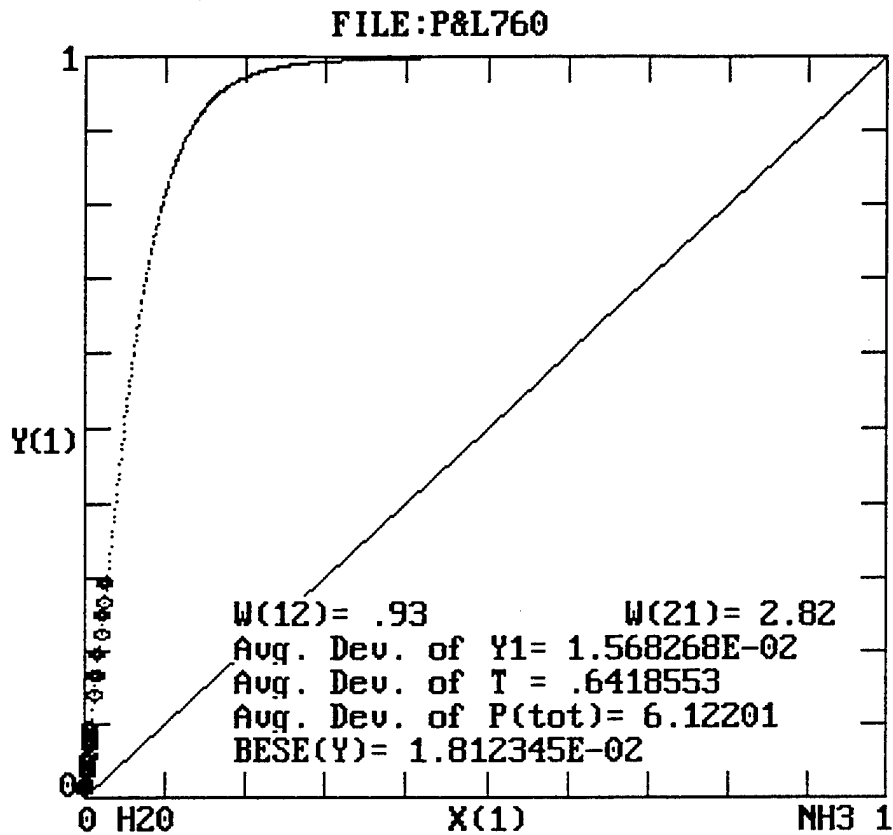
				f(S) Curved Fit				Wijs
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0000	760.0	759.9	0.00	0.0001	0.0001	100.0	99.9	0.1
0.0000	760.0	760.1	0.00	0.0003	0.0004	100.0	99.9	0.3
0.0001	760.0	757.5	0.30	0.0007	0.0008	99.9	99.8	0.6
0.0001	760.0	761.0	0.10	0.0017	0.0017	100.0	99.9	1.3
0.0002	760.0	755.6	0.60	0.0025	0.0026	99.7	99.7	2.0
0.0002	760.0	755.7	0.60	0.0027	0.0027	99.7	99.7	2.1
0.0005	760.0	759.3	0.10	0.0072	0.0073	99.8	99.7	5.6
0.0007	760.0	758.6	0.20	0.0106	0.0103	99.7	99.6	7.8
0.0008	760.0	759.5	0.10	0.0117	0.0117	99.7	99.6	8.9
0.0012	760.0	757.6	0.30	0.0163	0.0170	99.5	99.4	12.9
0.0016	760.0	758.6	0.20	0.0218	0.0226	99.3	99.3	17.1
0.0020	760.0	756.5	0.50	0.0276	0.0272	99.2	99.1	20.6

W(12)= 3.945825 W(21)= 1.125348
 BESE(Y)= 0.0003 a.d.(Y1)= 0.0002
 a.d.ABS(Pt)= 1.9 a.d.REL(Pt)= 0.002
 R^2/N=0.00095 a.d.(T)= 0.03

FILE:SAK760

				f(S) Linear Fit				Wijs
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0000	760.0	759.9	0.00	0.0001	0.0001	100.0	99.9	0.1
0.0000	760.0	760.1	0.00	0.0003	0.0004	100.0	99.9	0.3
0.0001	760.0	757.6	0.30	0.0007	0.0009	99.9	99.8	0.7
0.0001	760.0	761.1	0.10	0.0017	0.0018	100.0	99.9	1.4
0.0002	760.0	755.7	0.60	0.0025	0.0028	99.7	99.7	2.1
0.0002	760.0	755.8	0.50	0.0027	0.0030	99.7	99.7	2.2
0.0005	760.0	759.7	0.00	0.0072	0.0079	99.8	99.7	6.0
0.0007	760.0	759.2	0.10	0.0106	0.0111	99.7	99.6	8.5
0.0008	760.0	760.2	0.00	0.0117	0.0126	99.7	99.6	9.6
0.0012	760.0	758.6	0.20	0.0163	0.0183	99.5	99.4	13.9
0.0016	760.0	757.3	0.40	0.0218	0.0243	99.3	99.2	18.4
0.0020	760.0	758.1	0.30	0.0276	0.0293	99.2	99.1	22.2

W(12)= 3.989053 W(21)= 1.038263
 BESE(Y)= 0.0011 a.d.(Y1)= 0.0008
 a.d.ABS(Pt)= 1.6 a.d.REL(Pt)= 0.002
 R^2/N=0.00110 a.d.(T)= 0.02



FILE:P&L760				Grid Search Wijs					
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)	
0.0247	760.0	761.5	0.20	0.2925	0.2678	90.7	92.2	203.9	
0.0206	760.0	759.1	0.10	0.2506	0.2244	92.0	93.6	170.3	
0.0153	760.0	764.7	0.60	0.1967	0.1662	93.9	95.5	127.1	
0.0127	760.0	745.1	2.00	0.1656	0.1394	94.8	95.6	103.9	
0.0070	760.0	755.9	0.50	0.0960	0.0767	96.9	97.8	58.0	
0.0067	760.0	743.9	2.10	0.0872	0.0736	97.5	97.4	54.7	
0.0051	760.0	747.2	1.70	0.0685	0.0558	98.1	98.0	41.7	
0.0039	760.0	761.9	0.30	0.0547	0.0422	98.1	98.9	32.1	
0.0033	760.0	753.0	0.90	0.0436	0.0355	98.8	98.8	26.7	
0.0029	760.0	754.3	0.70	0.0395	0.0318	98.9	98.9	24.0	
0.0015	760.0	758.4	0.20	0.0205	0.0163	99.5	99.5	12.3	
0.0010	760.0	757.6	0.30	0.0135	0.0112	99.7	99.6	8.5	
W(12)= .93				W(21)= 2.82					
BESE(Y)= 0.0181				a.d.(Y1)= 0.0157					
a.d.ABS(Pt)= 6.1				a.d.REL(Pt)= 0.008					
R^2/N=0.00028				a.d.(T)= 0.64					

FILE:P&L760

X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0247	760.0	756.4	0.50	0.2925	0.2863	90.7	91.3	216.6
0.0206	760.0	754.0	0.80	0.2506	0.2443	92.0	92.6	184.2
0.0153	760.0	758.0	0.30	0.1967	0.1858	93.9	94.6	140.8
0.0127	760.0	757.8	0.30	0.1656	0.1562	94.8	95.5	118.4
0.0070	760.0	763.6	0.50	0.0960	0.0889	96.9	97.7	67.9
0.0067	760.0	753.6	0.80	0.0872	0.0854	97.5	97.4	64.3
0.0051	760.0	754.9	0.70	0.0685	0.0654	98.1	98.0	49.4
0.0039	760.0	743.9	2.10	0.0547	0.0505	98.1	98.0	37.6
0.0033	760.0	758.5	0.20	0.0436	0.0421	98.8	98.8	32.0
0.0029	760.0	756.6	0.40	0.0395	0.0378	98.9	98.8	28.6
0.0015	760.0	758.3	0.20	0.0205	0.0196	99.5	99.4	14.8
0.0010	760.0	759.3	0.10	0.0135	0.0134	99.7	99.6	10.2

W(12)= 4.167985 W(21)= 1.125906
 BESE(Y)= 0.0056 a.d.(Y1)= 0.0044
 a.d.ABS(Pt)= 4.4 a.d.REL(Pt)= 0.006
 R^2/N=0.00045 a.d.(T)= 0.32

FILE:P&L760

X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.0247	760.0	759.3	0.10	0.2925	0.2917	90.7	91.2	221.5
0.0206	760.0	756.3	0.50	0.2506	0.2492	92.0	92.6	188.5
0.0153	760.0	759.0	0.10	0.1967	0.1899	93.9	94.5	144.1
0.0127	760.0	760.8	0.10	0.1656	0.1596	94.8	95.5	121.4
0.0070	760.0	741.6	2.40	0.0960	0.0922	96.9	96.8	68.4
0.0067	760.0	755.3	0.60	0.0872	0.0874	97.5	97.4	66.0
0.0051	760.0	756.4	0.50	0.0685	0.0670	98.1	98.0	50.7
0.0039	760.0	744.9	2.00	0.0547	0.0518	98.1	98.0	38.6
0.0033	760.0	756.6	0.40	0.0436	0.0432	98.8	98.7	32.7
0.0029	760.0	757.4	0.30	0.0395	0.0388	98.9	98.8	29.4
0.0015	760.0	758.7	0.20	0.0205	0.0201	99.5	99.4	15.2
0.0010	760.0	759.6	0.10	0.0135	0.0138	99.7	99.6	10.5

W(12)= 4.182886 W(21)= 1.096213
 BESE(Y)= 0.0030 a.d.(Y1)= 0.0021
 a.d.ABS(Pt)= 4.6 a.d.REL(Pt)= 0.006
 R^2/N=0.00069 a.d.(T)= 0.24

FILE:HAR35

				f(S) Curved Fit Wijs				
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.7088	6343.1	4644.7	26.80	0.9898	0.9992	35.0	35.0	4641.0
0.8761	8942.6	7838.0	12.40	0.9940	0.9999	35.0	35.0	7837.5

W(12)= 5.065144 W(21)= 1.603605
 BESE(Y)= 0.0078 a.d.(Y1)= 0.0076
 a.d.ABS(Pt)=1401.5 a.d.REL(Pt)= 0.196
 R^2/N=0.43205 a.d.(T)= 0.09

FILE:HAR35

				f(S) Linear Fit Wijs				
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.7088	6343.1	4643.9	26.80	0.9898	0.9992	35.0	35.0	4640.3
0.8761	8942.6	7842.9	12.30	0.9940	0.9999	35.0	35.0	7842.5

W(12)= 5.032885 W(21)= 1.679739
 BESE(Y)= 0.0078 a.d.(Y1)= 0.0076
 a.d.ABS(Pt)=1399.5 a.d.REL(Pt)= 0.195
 R^2/N=0.43970 a.d.(T)= 0.09

FILE:HAR40

X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.3604	2021.0	1303.1	35.50	0.9898	0.9780	40.0	40.0	1274.5

W(12)= 5.006264 W(21)= 1.521318
 BESE(Y)= 0.0118 a.d.(Y1)= 0.0118
 a.d.ABS(Pt)= 717.9 a.d.REL(Pt)= 0.355
 R^2/N=0.23553 a.d.(T)= 0.09

FILE:HAR40

X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.3604	2021.0	1278.8	36.70	0.9898	0.9779	40.0	40.0	1250.5

W(12)= 4.966953 W(21)= 1.611134
 BESE(Y)= 0.0119 a.d.(Y1)= 0.0119
 a.d.ABS(Pt)= 742.2 a.d.REL(Pt)= 0.367
 R^2/N=0.23961 a.d.(T)= 0.09

FILE:HAR50

					f(S) Curved Fit Wijs			
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.3724	2809.1	1932.9	31.20	0.9844	0.9756	50.0	50.0	1885.6
0.7080	9539.6	7194.8	24.60	0.9966	0.9987	50.0	50.0	7185.7
0.9051	13392.5	12838.4	4.10	0.9981	0.9999	50.0	50.0	12837.7
W(12)= 4.877844				W(21)= 1.385117				
BESE(Y)= 0.0054				a.d.(Y1)= 0.0043				
a.d.ABS(Pt)=1258.4				a.d.REL(Pt)= 0.200				
R^2/N=0.09248				a.d.(T)= 0.09				

FILE:HAR50

					f(S) Linear Fit Wijs			
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.3724	2809.1	1892.4	32.60	0.9844	0.9754	50.0	50.0	1845.8
0.7080	9539.6	7189.3	24.60	0.9966	0.9988	50.0	50.0	7180.5
0.9051	13392.5	12846.3	4.10	0.9981	1.0000	50.0	50.0	12845.7
W(12)= 4.83192				W(21)= 1.483979				
BESE(Y)= 0.0055				a.d.(Y1)= 0.0044				
a.d.ABS(Pt)=1271.1				a.d.REL(Pt)= 0.204				
R^2/N=0.09622				a.d.(T)= 0.09				

FILE:HAR75

				f(S) Curved Fit Wijs				
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.6964	17180.0	13381.8	22.10	0.9957	0.9973	75.0	75.013346.1	
0.8958	24104.0	23301.7	3.30	0.9978	0.9999	75.0	75.023298.3	
W(12)= 4.484226				W(21)= 1.176718				
BESE(Y)= 0.0019				a.d.(Y1)= 0.0019				
a.d.ABS(Pt)=2300.2				a.d.REL(Pt)= 0.127				
R^2/N=0.05001				a.d.(T)= 0.09				

FILE:HAR75

				f(S) Linear Fit Wijs				
X1(i)	Pt(i)	Pt(c)	%dPt	Y1(i)	Y1(c)	T(i)	T(c)	P1(c)
0.6964	17180.0	13368.8	22.20	0.9957	0.9974	75.0	75.013333.7	
0.8958	24104.0	23307.5	3.30	0.9978	0.9999	75.0	75.023304.2	
W(12)= 4.461128				W(21)= 1.221568				
BESE(Y)= 0.0019				a.d.(Y1)= 0.0019				
a.d.ABS(Pt)=2303.8				a.d.REL(Pt)= 0.127				
R^2/N=0.05136				a.d.(T)= 0.09				